

**Bid Document for Services  
(Two-Envelope Bidding Process Without Prequalification)**

**Procurement of:**

**Contract Package MNS-01:** Composite Works Contract for Design and Construction of Station Building, balance works of IMD Building, Electrical, S&T and track maintenance office S&T huts, station approach roads including General Electrical Services and other associated works at Manesar in connection with laying of New BG Double Railway Line of Haryana Orbital Rail Corridor (HORC) Project.

Bid No: HORC/HRIDC/MNS-01/STN/2025

Contract title: Composite Works Contract (Civil, Electrical, Road works and other associated works)

Project: Haryana Orbital Rail Corridor Project

Employer: Haryana Orbital Rail Corporation Limited

Country: INDIA

Issued on: 06.02.2025

**Volume II**  
**Bill of Quantities**  
(To be signed and uploaded with Financial Bid)

**Letter of Financial Bid**

Date:

Bid No.: HORC/HRIDC/MNS-01/STN/2024

To,

Chief Project Manager/West  
Haryana Rail Infrastructure Development Corporation Limited (HRIDC),  
IRCON Tower-2, 3r Floor,  
Plot No. 16, Sector-32,  
Gurugram – 122018  
Tel: 0124 2979623

We, the undersigned, hereby submit second part of our Bid, the Bid Price and Bill of Quantities.

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8;
- (b) We offer to execute the Work in conformity with the Bidding Documents;
- (c) **\*\*The total price of our Bid is indicated in the **Bill of Quantities uploaded on eProcurement portal**;**
- (d) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (e) We have not made any deviations from the requirement of the bidding document and we have also not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summary rejection and forfeiture of bid security/the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.
- (f) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

**Name of the Bidder:** *[insert complete name of the Bidder]*

**Name of the person duly authorized to sign the Bid on behalf of the Bidder:** *\*[insert complete name of person duly authorized to sign the Bid]*

**Title of the person signing the Bid:** *[insert complete title of the person signing the Bid]*

**Signature of the person named above:** *[insert signature of person whose name and capacity are shown above]*

**Date signed** *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

\*Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be submitted in Form ELI-1.2.

\*\* The total price of Bid is Worksheet BOQ1 (Bill of Quantities) of MS-Excel File includes. Correction of Arithmetical Errors, if any, observed in MS-Excel sheets uploaded on eProcurement portal shall be carried out in accordance with ITB 36.

## Schedule of Price Adjustment Data

### 1. Price adjustment

1.1 The amounts payable to the Contractor for Works shall be adjusted in accordance with the provisions of this Clause 1.0 and Sub-Clause 13.8 of GCC.

1.2 The Contract Price shall be adjusted for increase or decrease in rates and prices of labour, materials, fuel and lubricants, equipment, Machinery, Plant and other Materials or inputs in accordance with the principles, procedures and formulae specified below:

a) Base month for the purpose of Price Adjustment shall be the month in which the Bid is opened. The 1st Quarter will start from Base month;

b) The following expressions and meanings are assigned to the value of the work done for Civil works:

CW = Value of work done for under the Schedule 'A' ;

c) Price adjustment for change in costs of civil works shall be paid in accordance with the following formula:

$$i) \quad VCW = 0.85 \text{ CW} \times [PC \times (C_i - C_o) / C_o + PLB \times (L_{Bi} - L_{Bo}) / L_{Bo} + PF \times (F_i - F_o) / F_o + PMACH \times (MACH_i - MACH_o) / MACH_o + POTH \times (OTH_i - OTH_o) / OTH_o + PSR \times (SR_i - SR_o) / SR_o];$$

Where,

VCW = Increase or decrease in the cost of Schedule 'A' during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (d);

PC, PF, PLB, PMACH, POTH and PSR are the percentages of cement, fuel and lubricants, labour, Plant Machinery and tools, other materials and Reinforcement steel/ steel components (including strands and steel cables) respectively for the relevant item as specified in sub-paragraph (d);

ii)  $C_o$  = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called "WPI") for sub-group Cement, Lime & Plaster for the Base Month;

$C_i$  = The WPI for sub-group Cement, Lime & Plaster for the average price index of the 3 months of the quarter under consideration;

iii)  $F_o$  = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called "WPI") for group Fuel & Power for the Base Month;

$F_i$  = The WPI for group Fuel & Power for the average price index of the 3 months of the quarter under consideration

iv)  $L_{Bo}$  = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called "CPI") for the Base Month;

$L_{Bi}$  = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration;

v)  $MACH_o$  = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called "WPI") for category- k "Manufacturing of Machinery for Mining, quarrying and construction' under (R) Manufacturing of Machinery and Equipment for the Base Month;

MACH<sub>i</sub> = The WPI for category- k “Manufacturing of Machinery for Mining, quarrying and construction’ under (R) Manufacturing of Machinery and Equipment for the average price index of the 3 months of the quarter under consideration;

- vi) OTH<sub>o</sub> = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called “WPI”) for all commodities for the Base Month;

OTH<sub>i</sub> = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration;

- vii) SR<sub>o</sub> = Average Rate of RINL for Rebar 8 mm (coil) as published for Ludhiana Branch on their website for the Base Month;

SR<sub>i</sub> = Average rate of RINL for Rebar 8 mm (coil) as published for Ludhiana Branch on their website for the 3 months of the quarter under consideration;

If only one rate is published for the 3 months of the quarter under consideration, the published rate for that quarter shall be considered for the quarter under consideration.

If no rate is published by RINL for Rebar 8mm (coil) for the 3 months of the quarter under consideration, the value of S<sub>i</sub> and S<sub>o</sub> will be taken as under:

“SR<sub>o</sub>”: Wholesale Price Index for ‘MS Bright Bars’ individual commodity of group item (d) Mild Steel- Long products under (N) MANUFACTURE OF BASIC METALS, published by Office of Economic Adviser, Government of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIIP) for the Base Month;

“SR<sub>i</sub>”: Average Wholesale Price Index for ‘MS Bright Bars’ individual commodity of group item (d) Mild Steel- Long products under (N) MANUFACTURE OF BASIC METAL, published by Office of Economic Adviser, Government of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIIP) for the 3 months of the quarter under consideration;

- d) The following percentages shall govern the price adjustment of the Contract Price for cost of civil works:

Component	CW (Schedule ‘A’)
(1)	(2)
Cement (PC)	15
Fuel and lubricants (PF)	15
Labour (PLB)	20
Machinery and Plants (PMACH)	10
Other Materials(POTH)	20
Reinforcement Steel (PSR)	20
<b>Total</b>	<b>100%</b>

- e) The following expressions and meanings are assigned to the value of the work done for Various General Electrical Services works:

- i) ELEGWK = Value of work done for General Electrical Services under Price Schedule ‘B’;

- f) Price adjustment for changes in cost for various General Electrical Services works shall be paid in accordance with the following formula:

- i) VELEGWK = 0.85 ELEGWK x [PLB x (LB<sub>i</sub> – LB<sub>o</sub>)/LB<sub>o</sub> + POTH x (OTH<sub>i</sub> – OTH<sub>o</sub>)/OTH<sub>o</sub>]

Where: -

**VELEGWK** = Increase or decrease in the cost of work done under Price Schedule ‘C’ of ‘**General Electrical Services works**’ with complete accessories during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (g);

PLB and POTH are the percentages of Labor and, All Other Commodities respectively for the relevant item as specified in sub-paragraph (i);

**LBo** = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called “CPI”) for the Base month;

**LBi** = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration

**OTHo** = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called “WPI”) for “All commodities” for the Base month;

**OTHi** = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration;

**g) The following percentages shall govern the price adjustment of the Contract Price for Various General Electrical Services works:**

<b>Component</b>	<b>General Electrical Services Works</b>
<b>Labour (PLB)</b>	20%
<b>All other commodities (POTH)</b>	80 %
<b>Total</b>	100.00%

## **Appendix B to Financial Part: Bill of Quantities**

### **1. Preamble**

- 1.1. The Bills of Quantities (BOQ) shall be read in conjunction with the Instructions to Bidders, the General Conditions, the Special Conditions, the Works Requirements, Bid Drawings and Documents, Appendices and the Addenda/Corrigenda (if any).
- 1.2. The quantities given in the Bills of Quantities are estimated and provisional and are given to provide a common basis for tendering. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
- 1.3. **Schedule 'A'** comprises of BoQ items for "Retaining Wall, Bridges & other civil works". Schedule 'A' is subdivided into twenty two Sub-Schedules A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, A16, A17, A18, A19, A20, A21 and A22. Cost of design and drawings of all the permanent works, temporary works, temporary road diversion is deemed to be included in the rates quoted for the relevant item of Schedule 'A' unless otherwise specified in the Contract. The Tenderer has to quote the percentage Excess (+) or Less (-) over the total Estimated amount of each Sub-Schedule of Schedule 'A' (which is shown as "Estimated Rate" against each Sub-Schedule of Schedule 'A' in BOQ1 of MS excel file on eProcurement portal). The payment against this Schedule 'A' will be made on the basis of quantities executed, measured and certified.
- 1.4. **Schedule 'B'** comprises of BoQ Items for "General Electrical Services works". The Bidder has to quote the percentage Excess (+) or Less (-) over the total Estimated amount of Schedule 'B' (which is shown as "Estimated Rate" against Schedule 'B' in BOQ3 of MS excel file on eProcurement portal). The quoted rate includes the cost of design and drawings of relevant systems and items as specified in the Contract Documents. The payment against this Schedule will be made on the basis of quantities executed, measured and certified by the Engineer. Under this Schedule, the Contractor is required to carry out all works of General Electrical Services works, which are not covered in Schedule 'A' as per site requirements and as per the direction of the Engineer.
- 1.5. The Bill of quantities may not generally give a full description of the works to be performed and the plant or equipment to be supplied under each item. Bidders shall be deemed to have read the Works Requirements and the other sections of the Bid Documents and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling the rates and prices.
- 1.6. The rates quoted in the Bill of Quantities for Schedule 'A' and Schedule 'B' are for complete and finished items of the work in all respects. The rates quoted in the Bill of Quantities shall, except otherwise specifically provided, shall include all design, all necessary survey work, plants, tools, machinery, Contractor's equipment, labour, compliance of labour laws, supervision, materials, transportation, handling, loading & unloading, storage, sampling, testing, fuel, oil, consumables, electric power, water, all

leads & lifts, dewatering, all temporary works including temporary accesses, staging, form works and false works, stacking, provision and maintenance of all temporary works area, construction of temporary store and buildings, fencing, barricading, lighting, drainage arrangements, erection & maintenance of inspection facilities above and below ground such as brick, concrete and steel etc., reinstatement, remedy of any defects during the Defects Notification Period, safety measures for workmen and road users, preparation of design and drawings pertaining to permanent and temporary works, & temporary diversion works, temporary road widening, traffic diversion works, mobilisation and demobilisation, establishment and overhead charges, labour camps, insurance cost for labour and works, contractor's profit, all taxes including Goods and Service Tax (GST), insurance, royalties, duties, cess, octroi, other levies and other charges together with all general risks, liabilities and obligations set out or implied in the Contract.

- 1.7. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Work.
- 1.8. To the extent acceptable to the Employer for the purpose of making payments or partial payments, valuing variations or evaluating claims, or for such other purposes as the Engineer may reasonably require, the Contractor may provide the Engineer with a breakdown of any composite or lump sum items included in the Bill of Quantities.
- 1.9. The prices shall be quoted against Schedule 'A' and Schedule 'B' in the Bill of Quantities (Excel Workbook) uploaded on the eProcurement portal.
- 1.10. The prices quoted shall be comprehensive and must include for complying in all respects with the Bill of Quantities, Instruction to Bidders, the General Conditions, the Special Conditions, Works Requirements, Specifications and Drawings and for all matters and things necessary for the proper design, construction, completion, and making good of any defect in part or of the whole of the Works.
- 1.11. No claims for additional payment shall be allowed for any error or misunderstanding by the Contractor of the work involved.
- 1.12. The rates quoted by the Tenderer are for design and construction of the Works as per approved drawings and as per Scope of the Works.

## **2. Variations in Price Schedule 'A' and Schedule 'B'**

- a. Variations in Bill of quantities shall be dealt in accordance with Sub Clause 12.3 and 13.3 Section 6- General Conditions of Contract.

## **3. Measurement and Payment**

- a. The measurement shall be made as per Bill of Quantities i.e. Schedule 'A' and Schedule 'B' and other relevant provisions of the Contract such as Works Requirements and the Drawings.
- b. If during execution of the Contract, it is decided by the Employer/Engineer that one or



more items of Work in a particular Schedule is not required to be executed, that particular Item of Work shall not be paid. No claim by the Contractor on this account shall be payable to the Contractor by the Employer. The Engineer's decision in this regard shall be final.

- c. The Payment shall be made as per Clause 14 [Contract Price and Payment] of the General Conditions of Contract.
- d. The Employer shall make interim payments to the Contractor in accordance with the provisions of Sub-Clause 14.6 [Issue of Interim Payment Certificates] of the General Conditions of Contract, as certified by the Engineer on the basis of the progress achieved for the items of works.
- e. The Contractor shall base its claim for interim payment in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates] of the General Conditions of Contract on the basis of actual progress of work executed till the end of the month for which the payment is claimed in relation to the Contractor's total executed quantity, supported with documents and updated programme in accordance with the Works Requirements.
- f. The Employer may carry out necessary tests, either directly or through an independent agency, of the Works done by the Contractor for which payment has been accepted and certified by the Engineer. The payment shall depend upon the outcome of such tests.
- g. Format for the Contractor's application for payment shall be agreed between the Engineer and the Contractor.
- h. All necessary supplementary details to support progress claims, including all certified Request for Inspection in hard bound copy, shall be included with application for payment. Sketches, drawings, approvals, calculations, test reports etc. shall accompany an application for payment to be substantiated and certified by the Engineer and submitted to the Employer.
- i. Even if no work is executed during the month, or the Contractor does not choose to issue an application for payment, a 'NIL' application shall be submitted.
- j. The Engineer is not obliged to issue an Interim Payment Certificate until such breakdown structure of payment schedule has been submitted and accepted by the Engineer.

#### **4. Methodology for Claiming Payment**

- a. The Contractor shall prepare his monthly application for payment in the agreed format in two hard copies and one soft copy. This shall be accompanied by supplementary details in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates] of the General Conditions. All hard copies shall bear the original signatures of the Contractor's Representative and be submitted to the Engineer.
- b. If these are found in order, in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] of the General Conditions, then the Engineer shall forward two certified copies of the application along with certified supplementary details to the Employer, with

his recommendation for payment; otherwise, all documents shall be returned to the Contractor for rectification and resubmission.

## 5. Work Items

The Bill of Quantities contains the following Schedules, which have been grouped according to the nature or timing of the work:

### 5.1 Schedule 'A': Civil and Road works -Schedule 'A' consists of following twenty two Sub-Schedules:

<b>SCHEDULE 'A': Civil and Road works</b>					
<b>S. No.</b>	<b>Sub-Schedule</b>	<b>Description</b>	<b>Item Range</b>	<b>No. of Items</b>	<b>Estimated Amount (INR)</b>
1	A1	Sub-Schedule 'A1': Earth Works	1 to 08	08	38,76,261.76
2	A2	Sub-Schedule 'A2': Concrete Works	09 to 14	06	26,34,704.25
3	A3	Sub-Schedule 'A3': RCC Works	15 to 20	06	6,64,63,854.14
4	A4	Sub-Schedule 'A4': Masonary Works	21 to 25	05	1,75,28,205.61
5	A5	Sub-Schedule 'A5': Cladding Works	26 to 34	09	56,01,239.14
6	A6	Sub-Schedule 'A6': Wooden Works	35 to 51	17	33,26,025.10
7	A7	Sub-Schedule 'A7': Steel Works	52 to 64	13	49,18,266.67
8	A8	Sub-Schedule 'A8': Flooring Works	65 to 73	09	1,41,21,296.44
9	A9	Sub-Schedule 'A9': Roofing Works	74 to 81	08	26,20,118.32
10	A10	Sub-Schedule 'A10': Finishing Works	82 to 95	14	1,34,45,716.74
11	A11	Sub-Schedule 'A11': Road Works	96 to 109	14	12,60,16,301.09
12	A12	Sub-Schedule 'A12': Sanitary Works	110 to 138	29	29,83,312.85
13	A13	Sub-Schedule 'A13': Water Supply Works	139 to 166	28	50,59,469.65
14	A14	Sub-Schedule 'A14': Drainage Works	167 to 178	12	22,04,813.29
15	A15	Sub-Schedule 'A15': Aluminium Works	179 to 189	11	86,38,146.65
16	A16	Sub-Schedule 'A16': Miscellaneous Works	190 to 192	03	18,74,598.37
17	A17	Sub-Schedule 'A17': Rain Water Harvesting Works	193 to 205	13	17,61,596.27

<b>SCHEDULE 'A': Civil and Road works</b>					
<b>S. No.</b>	<b>Sub-Schedule</b>	<b>Description</b>	<b>Item Range</b>	<b>No. of Items</b>	<b>Estimated Amount (INR)</b>
18	A18	Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works	206 to 213	08	95,01,393.88
19	A19	Sub-Schedule 'A19': Horticulture & Landscaping Works	214	01	5,00,000.00
20	A20	Sub-Schedule 'A20' DSR-Miscellaneous Works	215	01	10,00,000.00
21	A21	Sub-Schedule 'A21': Geo Technical Works	216-220	05	1,72,752.12
22	A22	Sub-Schedule 'A22': NS /USSOR Items	221-229	09	1,60,21,040.56
<b>Total Estimated Amount of Schedule 'A' (INR)</b>					<b>31,02,69,112.90</b>

## Schedule A: Civil and Road works

### 5.1.1 Sub-Schedule 'A1': Earthworks

Sub-Schedule 'A1': Earthworks						
S. No	DSR No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
1.	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in charge.				
1.1	2.6.1	All kinds of soil	Cum	4,492.600	215.40	9,67,715.02
2.	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
2.1	2.8.1	All kinds of soil.	Cum	<b>838.160</b>	300.75	2,52,072.44
3.	2.10	Excavating trenches by mechanical / manual means of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, for all depth, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and				

<b>Sub-Schedule 'A1': Earthworks</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		disposing of surplus excavated soil as directed, within a lead of 50 m :				
3.1	2.10.1	All kinds of soil				
3.1.1	2.10.1.1	pipes, cables etc, not exceeding 80 mm dia.	Rmt	240.000	267.93	64,302.92
3.1.2	2.10.1.2	pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	Rmt	210.000	437.57	91,888.95
4.	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	1,303.400	266.25	3,47,031.99
5.	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	803.800	2,125.54	17,08,511.22
6.	2.31	clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	Sqm	850.620	15.20	12,931.45
7.	2.34	Supplying chemical emulsion in sealed containers including delivery as specified.				
7.1	2.34.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	Litre	395.000	210.63	83,199.48

<b>Sub-Schedule 'A1': Earthworks</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
8.	2.35	Diluting and injecting chemical emulsion for Post-Constructional I anti-termite treatment (excluding the cost of chemical emulsion):				
8.1	2.35.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300mm including excavation channel along the wall & rodding etc. complete:				
8.1.1	2.35.1.1	With chlorpyrifos/ lindane E.c. 20% with 1% concentration	Metre	337.800	33.86	11,439.47
8.2	2.35.2	Along the external wall below concrete or masonry apron using chemical emulsion @ 2.25 litres per linear metre including drilling and plugging holes etc.:				
8.2.1	2.35.2.1	With chlorpyrifos/ lindane E.c. 20% with 1% concentration	Metre	367.200	46.87	17,208.93
8.3	2.35.3	Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor:				
8.3.1	2.35.3.1	With chlorpyrifos/lindane E.c. 20% with 1% concentration	Sqm	1,191.400	268.56	3,19,959.89
<b>Total Estimated Value of Sub-Schedule 'A1'- Earthworks</b>						<b>38,76,261.76</b>

## 5.1.2 Sub-Schedule 'A2': CONCRETE WORKS

Sub-Schedule 'A2': CONCRETE WORKS						
S. No	DSR No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
9.	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:				
9.1	4.1.2	1:1½:3 (1 cement: 1½ coarse sand (zone-iii) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	160.700	6,629.92	10,65,428.14
9.2	4.1.5	1:3:6 (1 cement: 3 coarse sand (zone-iii) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	Cum	199.600	5,439.97	10,85,818.01
10.	4.3	centering and shuttering including strutting, propping etc. and removal of form work for:				
10.1	4.3.1	foundations, footings, bases for columns	Sqm	279.400	322.87	90,209.07
11.	4.10	providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement: 2 coarse sand (zone-iii) derived from natural sources : 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	Sqm	140.200	388.81	54,511.72
12.	4.12	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	bag of cement of 50kg	44.864	59.92	2,688.18

<b>Sub-Schedule 'A2': CONCRETE WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
13.	4.13	providing & applying a coat of residual petroleum bitumen of grade of Vg-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	Sqm	140.200	119.36	16,734.96
14.	4.17	making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand (zone iii) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	Sqm	446.800	714.67	3,19,314.17
<b>Total Estimated Value of Sub-Schedule 'A2' -CONCRETE WORKS</b>						<b>26,34,704.25</b>



**5.1.3 Sub-Schedule 'A3': RCC WORKS**

<b>Sub-Schedule 'A3': RCC WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
15.	5.9	centering and shuttering including strutting, propping etc. and removal of form for				
15.1	5.9.1	foundations, footings, bases of columns, etc. for mass concrete	Sqm	888.400	322.87	2,86,835.13
15.2	5.9.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	Sqm	167.200	701.98	1,17,371.56
15.3	5.9.3	Suspended floors, roofs, landings, balconies and access platform	Sqm	3,108.800	803.68	24,98,485.61
15.4	5.9.5	lintels, beams, plinth beams, girders, bressumers and cantilevers	Sqm	2,266.000	637.82	14,45,296.66
15.5	5.9.6	columns, pillars, piers, Abutments, posts and Struts	Sqm	2,408.600	843.21	20,30,950.48
15.6	5.9.7	Stairs, (excluding landings) except spiral-staircases	Sqm	513.950	689.61	3,54,425.78
15.7	5.9.13	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards	Sqm	33.440	1,153.70	38,579.84
15.8	5.9.15	Small lintels not exceeding 1.5 m clear span, moulding as in cornices, window sills, string courses, bands, copings, bed plates, anchor blocks and the like	Sqm	196.360	322.87	63,398.18
15.9	5.9.19	Weather shed, chajjas, corbels etc., including edges	Sqm	294.880	854.43	2,51,953.19

<b>Sub-Schedule 'A3': RCC WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
16.	5.18	providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-iii) : 4 graded stone aggregate 6mm nominal size ), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits				
16.1	5.18.2	40 mm thick	Sqm	310.000	1,499.58	4,64,870.96
17.	5.22	Steel reinforcement for r.c.c. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
17.1	5.22.6	thermo-mechanically treated bars of grade fe-500D or more.	Kg	2,30,117.141	84.04	1,93,39,044.53
17.2	5.22A	Steel reinforcement for r.c.c. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
17.2.1	5.22A.6	thermo-mechanically treated bars of grade fe-500D or more.	Kg	1,25,011.108	84.04	1,05,05,933.52
18.	5.23	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	Sqm	2,606.220	265.31	6,91,450.45

<b>Sub-Schedule 'A3': RCC WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
19.	5.33	providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, portland pozzolana / ordinary portland /portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-in-charge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. in case the cement content in design mix is more than 110% of the specified minimum cement content, the				
19.1	5.33.1	All works upto plinth level				
19.1.1	5.33.1.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum	2,171.150	8,109.61	1,76,07,179.75
19.2	5.33.2	All works above plinth level upto floor V level				
19.2.1	5.33.2.1	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum	1,148.400	8,109.61	93,13,076.12

<b>Sub-Schedule 'A3': RCC WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
20.	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.	Quintal	1,895.250	767.71	14,55,002.38
<b>Total Estimated Value of Sub-Schedule 'A3': RCC WORKS</b>						<b>6,64,63,854.14</b>

**5.1.4 Sub-Schedule 'A4': MASONARY WORKS**

<b>Sub-Schedule 'A4': MASONARY WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
21.	6.2	Brick work with common burnt clay modular bricks of class designation 7.5 in foundation and plinth in:				
21.1	6.2.2	Cement Mortar 1:6 (1 cement: 6 coarse sand).	Cum	141.600	6,980.78	9,88,477.83
22.	6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in:				
22.1	6.4.1	Cement mortar 1:4 (1 cement: 4 coarse sand)	Cum	984.800	8,924.43	87,88,774.85
22.2	6.4.2	Cement mortar 1:6 (1 cement: 6 coarse sand)	Cum	236.080	8,689.84	20,51,496.88
23.	6.5	Extra for brick work / AAC block masonry / Tile brick masonry in superstructure above floor V level, for each four floors or part thereof by mechanical means.	Cum	165.377	148.88	24,621.02
24.	6.38	Providing and laying Autoclaved Aerated concrete (AAC) blocks masonry 100 mm/ 125 mm thick with Grade-1 AAC blocks of density 551 to 650 kg/cum conforming to IS:2185 (Part 3) in super structure above plinth level up to floor V level in cement mortar 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6 mm dia M.S. bars at every third course of masonry work.	Cum	259.495	9,321.47	24,18,870.89

<b>Sub-Schedule 'A4': MASONARY WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
25.	6.47	Providing and laying Autoclaved Aerated concrete (AAC) blocks masonry with 150mm to 300 mm thick with Grade-1 AAC blocks of density 551 to 650 kg/cum conforming to IS:2185 (Part 3) in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for separately).	Cum	578.818	7,332.95	42,44,441.97
<b>Total Estimated Value of Sub-Schedule 'A4': MASONARY WORKS</b>						<b>1,75,28,205.61</b>

## 5.1.5 Sub-Schedule 'A5': CLADDING WORKS

Sub-Schedule 'A5': CLADDING WORKS						
S. No	DSR No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
26.	8.1	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).				
26.1	8.1.1	Raj Nagar Plain white marble/ <b>Udaipur green marble</b> / Zebra black marble.				
26.1.1	8.1.1.1	Area of slab upto 0.50 sqm	Sqm	44.100	5,061.24	2,23,200.65
26.1.2	8.1.1.2	Area of slab over 0.50 sqm	Sqm	39.600	5,240.21	2,07,512.24
27.	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
27.1	8.2.2	Granite of any colour and shade				

<b>Sub-Schedule 'A5': CLADDING WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
27.1.1	8.2.2.1	Area of slab upto 0.50 sqm	Sqm	230.364	4,906.02	11,30,169.86
27.1.2	8.2.2.2	Area of slab over 0.50 sqm	Sqm	358.446	4,639.71	16,63,086.91
28.	8.4	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	Metre	150.000	498.59	74,787.85
29.	8.5	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete	Each	73.800	655.22	48,355.43
30.	8.7	Providing and fixing cramps of required size & shape in RCC/ CC / Brick masonry backing with cement mortar 1:2 ( 1 cement :2 coarse sand), including drilling necessary hole in stones and embedding the cramp in the hole (fastener to be paid separately)				
30.1	8.7.2	Stainless steel cramps	Kg	83.700	749.01	62,691.76
31.	8.8	Providing and fixing expansion hold fasteners on C.C. /R.C.C./Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete.				
31.1	8.8.1	Wedge expansion type				
31.1.1	8.8.1.2	Fastener with threaded dia 10 mm	Each	1,256.000	35.44	44,509.21



<b>Sub-Schedule 'A5': CLADDING WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
32.	8.10	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.				
32.1	8.10.2	Granite Stone of approved shade	Sqm	51.480	3,714.47	1,91,220.69
33.	8.31	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete	Sqm	1,333.328	1,114.96	14,86,611.52
34.	8.32	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building , for all heights and all levels etc. including: (a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required,	Sqm	100.000	4,690.93	4,69,093.02

<b>Sub-Schedule 'A5': CLADDING WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		proper drainage of water to make it watertight including checking of all the structural and functional design.				
<b>Total Estimated Value of Sub-Schedule 'A5': CLADDING WORKS</b>						<b>56,01,239.14</b>

**5.1.6 Sub-Schedule 'A6': WOODEN WORKS**

<b>Sub-Schedule 'A6': WOODEN WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
35.	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
35.1	9.1.1	Second class teak wood	Cum	2.940	1,37,950.54	4,05,574.58
36.	9.20	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.				
36.1	9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	313.914	3,235.59	10,15,697.21
37.	9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	Sqm	199.800	420.84	84,084.59
38.	9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
38.1	9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	Kg	2,881.800	207.28	5,97,329.67

<b>Sub-Schedule 'A6': WOODEN WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
39.	9.53	Providing 40x5 mm flat iron hold fast 400 mm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 300x100x150mm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Each	293.000	203.76	59,702.94
40.	9.74	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :				
40.1	9.74.1	250x10 mm	Each	75.000	392.48	29,436.26
40.2	9.74.3	150x10 mm	Each	24.000	243.55	5,845.26
41.	9.75	Providing and fixing bright finished brass door latch with necessary screws etc. complete :				
41.1	9.75.2	250x16x5 mm	Each	75.000	272.38	20,428.85
42.	9.81	Providing and fixing bright finished brass handles with screws etc. complete:				
42.1	9.81.1	125 mm	Each	149.000	215.04	32,040.22
42.2	9.81.2	100 mm	Each	47.000	199.05	9,355.18
43.	9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete.	Each	75.000	114.91	8,618.18

<b>Sub-Schedule 'A6': WOODEN WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
44.	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	Each	75.000	1,075.33	80,649.94
45.	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	Each	100.000	897.78	89,777.92
46.	9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
46.1	9.97.1	300x10	Each	10.000	123.35	1,233.49
46.2	9.97.3	200x10	Each	8.000	95.20	761.59
46.3	9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
46.3.1	9.101.1	Single rubber stopper	Each	48.000	37.22	1,786.54
46.3.2	9.101.2	Twin rubber stopper	Each	30.000	65.27	1,957.96

<b>Sub-Schedule 'A6': WOODEN WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
47.	9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	Each	120.000	775.64	93,076.31
48.	9.117	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance $\pm 1$ mm), with wall thickness 2.0 mm ( $\pm 0.2$ mm), corners of the door frame to be Jointed with galvanized brackets and stainless steel screws, joints mitred and Plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19 mm and 1mm ( $\pm 0.1$ mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in charge				
48.1	9.117.1	Extruded section profile size 48x40 mm	Metre	106.200	243.81	25,893.12
49.	9.118	Providing and fixing to existing door frames				

<b>Sub-Schedule 'A6': WOODEN WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
49.1	9.118.2	30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm ( $\pm 0.2$ mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm ( $\pm 0.2$ mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm ( $\pm 0.1$ mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	Sqm	49.140	2,105.84	1,03,481.18
50.	9.143	Providing and Fixing factory made uPVC door frame, made of uPVC extruded sections, of size 65 mm x 55 mm with wall thickness 2.0 mm ( $\pm 0.2$ mm), corners of the door frame to be mitred cut and jointed with plastic brackets and stainless steel screws, reinforcing hinge side vertical of the frames with PVC profile of Size 28 mm x 30 mm having wall thickness 2 mm ( $\pm 0.2$ mm), including providing & fixing 3 nos of 125 mm long stainless steel hinges to the frame, fixing the frame with jamb	Rmt	472.160	484.64	2,28,828.28

<b>Sub-Schedule 'A6': WOODEN WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		with required number & size of anchor dash fastners, all complete as per manufacturer's specification and direction of Engineer-in-charge.				
51.	9.144	Providing and fixing 37 mm thick factory made PVC door shutter, styles and rails made of PVC hollow section of size 100 mm x 37 mm with wall thickness 2 mm ( $\pm 0.2$ mm), with inbuilt bead on one side, styles and rails mitered cut and joint at the corners by means of 2 nos of plastic brackets of size 75 mm x 220 mm at each corner and stainless steel screws, reinforcing the hinge side of style by inserting PVC profile of size 28 mm x 30 mm, with wall thickness 2 mm ( $\pm 0.2$ mm). Lockrail of size 100 mm x 37 mm, wall thickness 2 mm ( $+ 0.2$ mm) will be fixed to the vertical styles. Providing with PVC snapfit beads and panel of size 100 mm x 20 mm, and inserting 2 nos tie bar of 6 mm dia and fastening with nuts and washers complete, all as per manufacturer's specification and direction of Engineer-in-charge.	Sqm	112.350	3,831.47	4,30,465.83
<b>Total Estimated Value of Sub-Schedule 'A6': WOODEN WORKS</b>						<b>33,26,025.10</b>



## 5.1.7 Sub-Schedule 'A7': STEEL WORKS

Sub-Schedule 'A7': STEEL WORKS						
S. No	DSR No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
52.	10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	1,030.000	97.56	1,00,484.06
53.	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	1,730.000	117.37	2,03,055.04
54.	10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	Sqm	16.200	9,852.56	1,59,611.43
55.	10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile				

<b>Sub-Schedule 'A7': STEEL WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.				
55.1	10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	Sqm	16.200	3,154.55	51,103.65
56.	10.7	Providing and fixing ball bearing for rolling shutters.	Each	130.000	444.75	57,817.27
57.	10.11	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators, side /top /centre hung, with beading and all members such as F7D,F4B, K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted, including providing and fixing of hinges, pivots, including priming coat of approved steel primer, but excluding the cost of other fittings, complete all as per approved design, (sectional weight of only steel members shall be measured for payment).				
57.1	10.11.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Kg	792.000	184.16	1,45,853.52

<b>Sub-Schedule 'A7': STEEL WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
58.	10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-in-charge:				
58.1	10.14.2	Profile C				
58.1.1	10.14.2.1	Fixing with adjustable lugs with split end tail to each jamb	Meter	502.600	494.08	2,48,323.28
59.	10.17	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	Each	55.000	194.96	10,722.66
60.	10.18	Providing and fixing circular/ Hexagonal cast iron or M.S. sheet box for ceiling fan clamp, of internal dia 140 mm, 73 mm height, top lid of 1.5 mm thick M.S. sheet with its top surface hacked for proper bonding, top lid shall be screwed into the cast iron/ M.S. sheet box by means of 3.3 mm dia round headed screws, one lock at the corners. Clamp shall be made of 12 mm dia M.S. bar bent to shape as per standard drawing.	Each	55.000	194.17	10,679.41

<b>Sub-Schedule 'A7': STEEL WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
61.	10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				
61.1	10.25.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	Kg	438.000	107.20	46,954.91
61.2	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	Kg	1,663.200	149.19	2,48,137.82
62.	10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
62.1	10.26.13	G.I. Pipes	Kg	200.000	164.76	32,952.47
63.	10.28	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	5,674.937	641.91	36,42,783.68

<b>Sub-Schedule 'A7': STEEL WORKS</b>						
<b>S. No</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
64.	10.30	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows all complete with :				
64.1	10.30.2	5.5 mm thick glass panes	Sqm	41.250	1,303.74	53,779.07
<b>Total Estimated Value of Sub-Schedule 'A7': STEEL WORKS</b>						<b>49,18,266.67</b>

**5.1.8 Sub-Schedule 'A8': FLOORING WORKS**

<b>Sub-Schedule 'A8': FLOORING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
65.	11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
65.1	11.3.1	40 mm thick with 20 mm nominal size stone aggregate	Sqm	326.127	571.40	1,86,348.90
66.	11.21	Providing and fixing 10 mm thick acid and/or alkali resistant tiles of approved make and colour using acid and/or alkali resisting mortar bedding, and joints filled with acid and/or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in- Charge				
66.1	11.21.1	In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)			-	
66.1.1	11.21.1.1	Acid and alkali resistant tile	Sqm	118.290	1,588.86	1,87,946.06
66.2	11.21.2	In dado/skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)				
66.2.1	11.21.2.1	Acid and alkali resistant tile	Sqm	371.960	1,717.03	6,38,666.55
67.	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
67.1	11.26.1	25 mm thick	Sqm	799.502	1,789.27	14,30,523.82
68.	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	865.566	2,137.30	18,49,971.93

<b>Sub-Schedule 'A8': FLOORING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
69.	11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), Jointing with grey cement slurry @ 3.3 kg/sqm including pointing the joints with white cement and matching pigment etc., complete.	Sqm	345.088	980.92	3,38,503.88
70.	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joints with white cement and matching pigments etc., complete.				
70.1	11.41.2	Size of Tile 600x600 mm	Sqm	4,029.153	1,485.27	59,84,390.61
71.	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
71.1	11.46.2	Size of Tile 600x600 mm	Sqm	810.619	1,537.54	12,46,356.49
72.	11.48	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				

<b>Sub-Schedule 'A8': FLOORING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
72.1	11.48.2	Size of Tile 600x600 mm	Sqm	4,029.153	271.18	10,92,621.77
73.	11.56	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
73.1	11.56.1	Polished Granite stone slab of colour Black, Cherry/Ruby Red or equivalent	Sqm	284.511	4,098.14	11,65,966.43
<b>Total Estimated Value of Sub-Schedule 'A8': Flooring Works</b>						<b>1,41,21,296.44</b>



## 5.1.9 Sub-Schedule 'A9': ROOFING WORKS

SUB-SCHEDULE 'A9': ROOFING WORKS						
S. No.	DSR No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
74.	12.1	Providing corrugated G.S. sheet roofing including vertical / curved surface fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead, including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (up to any pitch in horizontal/ vertical or curved surfaces), excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.				
74.1	12.1.2	0.80 mm thick with zinc coating not less than 275 gm/m <sup>2</sup>	Sqm	500.000	1,190.45	5,95,225.60
75.	12.21	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10 mm and down gauge), including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :				
75.1	12.21.1	In 75x75 mm deep chase	Metre	343.273	272.80	93,646.22
76.	12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x 1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	Each	48.000	279.51	13,416.68
77.	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
77.1	12.41.2	110 mm diameter	Metre	1,360.000	335.24	4,55,924.62

<b>SUB-SCHEDULE 'A9': ROOFING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
78.	12.42	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
78.1	12.42.5	Bend 87.5°				
78.1.1	12.42.5.2	110 mm bend	Each	197.000	138.39	27,263.63
78.2	12.42.6	Shoe (Plain)				
78.2.1	12.42.6.2	110 mm Shoe	Each	197.000	121.57	23,948.62

<b>SUB-SCHEDULE 'A9': ROOFING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
79.	12.45	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/ making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				

<b>SUB-SCHEDULE 'A9': ROOFING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
79.1	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks).	Sqm	219.000	1,201.46	2,63,119.70

<b>SUB-SCHEDULE 'A9': ROOFING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
80.	12.52	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections ( galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/ making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				

<b>SUB-SCHEDULE 'A9': ROOFING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
80.1	12.52.1	GI Metal Ceiling Lay in plain Tegular edge Global white colour tiles of size 595x595 mm, and 0.5 mm thick with 8 mm drop; made of G I sheet having galvanizing of 100 gms/sqm (both sides inclusive) and electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending.	Sqm	143.000	1,668.80	2,38,638.68
81.	12.55	Providing and fixing Heat Resistant Terrace Tiles (300 mm x 300 mm x 20 mm) with SRI (solar refractive index) > 78, solar reflection > 0.70 and initial emittance > 0.75 on waterproof and sloped surface of terrace, laid on 20 mm thick cement sand mortar in the ratio of 1:4 (1 cement : 4 coarse sand) and grouting the joints with mix of white cement & marble powder in ratio of 1:1, including rubbing and polishing of the surface upto 3 cuts complete, including providing skirting upto 150 mm height along the parapet walls in the same manner	Sqm	600.000	1,514.89	9,08,934.57
<b>Total Estimated Value of Sub-Schedule 'A9': Roofing Work</b>						<b>26,20,118.32</b>

**5.1.10 Sub-Schedule 'A10': FINISHING WORKS**

<b>SUB-SCHEDULE 'A10': FINISHING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
82.	13.4	12 mm cement plaster of mix:				
82.1	13.4.1	1:4 (1 cement : 4 coarse sand)	Sqm	10,184.481	309.13	31,48,354.52
83.	13.5	15 mm cement plaster on rough side of single or half brick wall of mix:				
83.1	13.5.1	1:4 (1 cement : 4 coarse sand)	Sqm	6,065.415	356.16	21,60,228.26
84.	13.16	6 mm cement plaster of mix :				
84.1	13.16.1	1:3 (1 cement : 3 fine sand)	Sqm	2,989.000	265.31	7,93,004.84
85.	13.22	Extra for plastering exterior walls of height more than 10 m from ground level for every additional height of 3 m or part there of.	Sqm	6,194.703	76.33	4,72,819.54
86.	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	Sqm	5,287.815	224.68	11,88,069.92
87.	13.37	White washing with lime to give an even shade:				
87.1	13.37.1	New work (three or more coats)	Sqm	<b>1,557.600</b>	34.02	52,992.48
88.	13.41	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gram/litre, of approved manufacturer and of required shade and colour all complete to achieve even shade and colour :				

<b>SUB-SCHEDULE 'A10': FINISHING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
88.1	13.41.1	New work (two or more coats) over and including water thinnable priming coat with cement primer having VOC content less than 50 gram/litre	Sqm	12,395.881	170.42	21,12,554.71
89.	13.44	Finishing walls with water proofing cement paint of required shade:				
89.1	13.44.1	New work (Two or more coats applied @ 3.84 kg/ 10 sqm)	Sqm	1,930.200	102.33	1,97,513.01
90.	13.45	Finishing walls with textured exterior paint of required shade :				
90.1	13.45.1	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	Sqm	3,357.615	256.87	8,62,463.16
91.	13.48	Finishing with Deluxe Multi surface paint system for interiors and exteriors using Primer as per manufacturers specifications:				
91.1	13.48.2	Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @0.75 ltr/10 sqm of approved brand and manufacture	Sqm	100.000	151.92	15,191.90
91.2	13.48.3	Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture	Sqm	1,500.000	146.83	2,20,251.03



<b>SUB-SCHEDULE 'A10': FINISHING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
91.3	13.48A	Finishing walls with ready mixed Premium acrylic emulsion paint (Company Depot Tinted) having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade with silicon additives.				
91.3.1	13.48A.1	New work (Two or more coats applied @ 1.43 litre/ 10 sqm over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm.	Sqm	1,007.284	161.93	1,63,111.14
92.	13.50	Applying priming coat:				
92.1	13.50.2	With ready mixed aluminium primer of approved brand and manufacture on resinous wood and plywood	Sqm	200.000	66.00	13,199.86
92.2	13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	Sqm	448.000	58.19	26,068.41
93.	13.57	Painting with oil type wood preservative of approved brand and manufacture:				
93.1	13.57.1	New work (two or more coats)	Sqm	410.000	49.38	20,246.42
94.	13.62	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
94.1	13.62.1	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Sqm	1,007.284	200.67	2,02,133.20

<b>SUB-SCHEDULE 'A10': FINISHING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
95.	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	13,843.081	129.85	17,97,514.34
<b>Total Estimated Value of Sub-Schedule 'A10': Finishing Work</b>						<b>1,34,45,716.74</b>

<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
96.	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres	Sqm	2,000.000	189.24	3,78,486.84
97.	16.15	Supplying at site:				
97.1	16.15.1	R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3 (1 cement: 1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs wherever required as per direction of Engineer-in charge (cost of earth works in excavation, concrete works in foundation to be paid separately).	Cum	5.000	29,988.53	1,49,942.65
98.	16.17	Fencing with R.C.C. post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9.38 kg per 100 metres (minimum), between the two posts fitted and fixed with G.I. staples on wooden plugs or G.I. binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately) : Payment to be made per metre cost of total length of barbed wire used.				

<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
98.1	16.17.1	With G.I. barbed wire	Metre	1,800.000	13.05	23,495.54
99.	16.53	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5 mm thick) wire of high tensile strength of 165 kg/ sq. mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	Metre	420.000	318.36	1,33,710.70
100.	16.54	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.				

<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
100.1	16.54.1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	Cum	225.000	10,498.34	23,62,127.46
101.	16.57	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.				
101.1	16.57.1	40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	cum	90.000	11,397.33	10,25,759.62

<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
102.	16.62	Providing and applying 2.5 mm thick road marking strips (retro-reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	Sqm	500.000	654.02	3,27,008.44
103.	16.68	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	1,200.000	997.07	11,96,479.73
104.	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer in-charge (length of finished kerb edging shall be measured to calculate	Cum	90.113	9,030.79	8,13,787.10

<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).				
105.	16.75	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately).	Cum	7,025.000	8,678.51	6,09,66,564.52
106.	16.78	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer in-Charge.				
106.1	16.78.2	With material conforming to Grade-II (size range 53 mm to 0.075 mm ) having CBR Value-25	Cum	8,848.000	2,910.10	2,57,48,586.80

<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
107.	16.79	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm ) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paver finisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.	Cum	5,924.000	2,939.46	1,74,13,353.97
108.	16.80	Construction of dry lean cement concrete sub base over a prepared sub grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineer-in- charge	Cum	3,478.800	4,330.63	1,50,65,409.01



<b>Sub-Schedule 'A11': ROAD WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
109.	16.93	Providing and placing in position 100 mm thick factory made machine batched & machine mixed Precast RCC Rectangular Covers on drains of footpath of various sizes, of M-25 grade cement concrete for RCC work, including cost of centering, shuttering, reinforcement of 8 mm dia TMT bars of Fe 500 grade @ maximum 100 mm c/c on both ways, neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick, 100 mm wide MS sheet duly painted over priming coat, reinforcement to be welded at edges with MS sheet and providing 2 Nos. 12 mm dia bar for hooks etc including cost of cartage, all leads & lift, handling at site etc. all complete as per direction of Engineer-in-Charge.	Sqm	150.000	2,743.92	4,11,588.71
<b>Total Estimated Value of Sub-Schedule 'A11': ROAD WORKS</b>						<b>12,60,16,301.09</b>

**5.1.11 Sub-Schedule 'A12': SANITARY WORKS**

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
110.	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
110.1	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	6.000	6,061.40	36,368.39
111.	17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
111.1	17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	Each	9.000	5,808.88	52,279.94
112.	17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of				

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		fittings and brackets, cutting and making good the walls and floors wherever required :				
112.1	17.4.3	Range of three urinal basins with 10litre white P.V.C. automatic flushing cistern	Each	6.000	11,801.66	70,809.96
113.	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				
113.1	17.7.2	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	Each	33.000	2,006.45	66,212.92
113.2	17.7A	Providing and fixing wash basin with C.I. brackets, 15 mm dia CP Brass single hole basin mixer of approved quality and make, including painting of fittings and brackets, cutting and making good the walls wherever required:-				
113.2.1	17.7A.a	(a) White Vitreous China Wash basin size 550x400 mm with a 15 mm CP Brass single hole basin mixer	Each	30.000	3,626.61	1,08,798.19
114.	17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	Each	6.000	1,572.71	9,436.27
115.	17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and				

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		brackets, cutting and making good the walls wherever required:				
115.1	17.10.1	Kitchen sink with drain board				
115.1.1	17.10.1.3	510x1040 mm bowl depth 200 mm	Each	12.000	6,580.01	78,960.11
115.2	17.22A	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	Each	65.000	929.18	60,396.70
116.	17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
116.1	17.28.2	Flexible pipe				
116.1.1	17.28.2.1	32 mm dia	Each	68.000	109.40	7,439.52
117.	17.29	Providing and fixing 100 mm sand cast Iron grating for gully trap.	Each	60.000	47.44	2,846.51
118.	17.31	Providing and fixing 600x450 mm bevelled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Each	12.000	1,479.51	17,754.07
119.	17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :				
119.1	17.32.4	Rectangular shape 1500x450 mm	Each	17.000	1,905.23	32,388.83
120.	17.34	Providing and fixing toilet paper holder:				

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
120.1	17.34.1	C.P. brass	Each	44.000	713.78	31,406.23
121.	17.35	Providing and fixing soil, waste and vent pipes:				
121.1	17.35.1	100 mm dia				
121.1.1	17.35.1.2	Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	Metre	390.000	1,129.59	4,40,539.81
121.2	17.35.2	75 mm diameter				
121.2.2	17.35.2.2	Centrifugally cast (spun) iron socketed pipe as per IS: 3989	Metre	174.000	1,092.58	1,90,108.80
122.	17.37	Providing and fixing M.S. holder-bat clamps of approved design to Sand Cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10x10x10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including cost of cutting holes and making good the walls etc. :				
122.1	17.37.1	For 100 mm dia pipe	Each	210.000	323.39	67,912.18
122.2	17.37.2	For 75 mm dia pipe	Each	174.000	319.20	55,540.38
123.	17.38	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.				
123.1	17.38.1	100 mm dia				
123.1.1	17.38.1.2	Sand cast iron S&S as per IS - 3989	Each	71.000	626.55	44,484.89
123.2	17.38.2	75 mm dia				
123.2.1	17.38.2.2	Sand cast iron S&S as per IS- 3989	Each	71.000	475.36	33,750.75
124.	17.39	Providing and fixing plain bend of required degree.				

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
124.1	17.39.1	100 mm dia				
124.1.1	17.39.1.2	Sand cast iron S&S as per IS : 3989	Each	131.000	461.05	60,397.75
124.2	17.39.2	75 mm dia				
124.2.1	17.39.2.2	Sand cast iron S&S as per IS - 3989	Each	71.000	312.64	22,197.78
125.	17.41	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :				
125.1	17.41.1	100x100x100x100 mm				
125.1.1	17.41.1.2	Sand cast iron S&S as per IS - 3989	Each	35.000	948.79	33,207.50
125.2	17.41.2	75x75x75x75 mm				
125.2.1	17.41.2.2	Sand cast iron S&S as per IS - 3989	Each	35.000	755.93	26,457.38
126.	17.42	Providing and fixing double equal plain junction of required degree.				
126.1	17.42.1	100x100x100x100 mm				
126.1.1	7.42.1.2	Sand cast iron S&S as per IS - 3989	Each	36.000	923.94	33,261.76
126.2	17.42.2	75x75x75x75 mm				
126.2.1	17.42.2.2	Sand cast iron S&S as per IS - 3989	Each	36.000	691.39	24,890.18
127.	17.56	Providing and fixing terminal guard:				
127.1	17.56.1	100 mm				
127.1.1	17.56.1.2	Sand cast iron S&S as per IS - 3989	Each	48.000	461.05	22,130.47
127.2	17.56.2	75 mm				
127.2.1	17.56.2.2	Sand cast iron S&S as per IS - 3989	Each	18.000	326.64	5,879.55

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
128.	17.57	Providing and fixing collar :				
128.1	17.57.1	100 mm dia				
128.1.1	17.57.1.2	Sand cast iron S&S as per IS - 3989	Each	60.000	461.05	27,663.09
128.2	17.57.2	75 mm dia				
128.2.1	17.57.2.2	Sand cast iron S&S as per IS - 3989	Each	48.000	284.60	13,660.75
129.	17.58	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter:				
129.1	17.58.1	100 mm	Each	147.000	576.28	84,712.43
129.2	17.58.2	75 mm	Each	78.000	488.99	38,141.41
130.	17.60	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
130.1	17.60.1	100 mm inlet and 100 mm outlet				
130.1.1	17.60.1.2	Sand cast iron S&S as per IS: 3989	Each	18.000	1,681.80	30,272.45
130.2	17.60.2	100 mm inlet and 75 mm outlet				
130.2.1	17.60.2.2	Sand cast iron S&S as per IS - 3989	Each	90.000	1,751.94	1,57,674.89
131.	17.61	Cutting chases in brick masonry walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 ( 1 cement : 3 coarse sand :6 graded stone aggregate 12.5 mm nominal size), including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				
131.1	17.61.1	100 mm dia	Metre	10.000	645.52	6,455.25

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
131.2	17.61.2	75 mm dia	Metre	10.000	463.62	4,636.20
132.	17.65	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :				
132.1	17.65.1	100 mm diameter pipe	Metre	348.000	72.92	25,375.81
132.2	17.65.2	75 mm diameter pipe	Metre	174.000	55.46	9,650.47
133.	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	Each	77.000	153.39	11,810.78
134.	17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	Each	42.000	214.62	9,013.86



<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
135.	17.77	Providing and fixing M.S. holder bat clamp of approved design to sand cast iron/ cast iron (spun) pipes comprising of M.S. flat brackets made of 50x5 mm flat of specified shape, projecting 75 mm outside the wall surface and fixed on wall with 4nos, 6mm dia expansion hold fasteners, including drilling necessary holes in brick wall/ CC/ RCC surface and the cost of bolts etc. The pipes shall be fixed to the already fixed brackets with the help of 30 mm x1.6 mm galvanised M.S. flats of specified shape and of total length 420 mm and shall be fixed with M.S. nuts, bolts, & washers of size 25x6 mm, one bolts on each side of the pipe.				
135.1	17.77.1	Total bracket length 580 mm of approved shape and design (for single 100 mm dia pipe)	Each	28.000	259.96	7,278.90
135.2	17.77.2	Total bracket length 810 mm of approved shape and design (for two 100 mm dia pipes)	Each	16.000	321.77	5,148.26
135.3	17.77.3	Total bracket length 1040 mm of approved shape and design (for three 100 mm dia pipes)	Each	8.000	383.36	3,066.90
136.	17.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres), including seat cover, and cistern fittings, nuts, bolts and gasket etc complete.	Each	41.000	13,668.04	5,60,389.66

<b>Sub-Schedule 'A12': SANITARY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
137.	17.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	Each	35.000	7,343.69	2,57,029.26
138.	17.81	Providing and fixing floor mounted, white vitreous china single piece, double traps syphonic water closet of approved brand/make, shape, size and pattern including integrated white vitreous china cistern of capacity 10 litres with dual flushing system, including all fittings and fixtures with seat cover, cistern fittings, nuts, bolts and gasket etc including making connection with the existing P/S trap, complete in all respect as per directions of Engineer-in-Charge.	Each	5.000	19,095.13	95,475.66
<b>Total Estimated Value of Sub-Schedule 'A12': ROAD WORKS</b>						<b>29,83,312.85</b>

## 5.1.12 Sub-Schedule 'A13': WATER SUPPLY WORKS

Sub-Schedule 'A13': WATER SUPPLY WORKS						
S. No.	DSR No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
139.	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work - Exposed on wall				
139.1	18.7.1	15 mm nominal outer dia pipes	Metre	180.000	268.30	48,293.24
139.2	18.7.2	20 mm nominal outer dia pipes	Metre	200.000	340.85	68,169.57
139.3	18.7.3	25 mm nominal outer dia pipes	Metre	120.000	428.34	51,400.82
140.	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.				
140.1	18.8.1	15 mm nominal outer dia pipes	Metre	524.000	462.52	2,42,360.12

<b>Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
140.2	18.8.2	20 mm nominal outer dia pipes	Metre	393.000	538.64	2,11,683.97
140.3	18.8.3	25 mm nominal outer dia pipes	Metre	396.000	656.38	2,59,924.84
141.	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge.				
141.1	18.9.1	15 mm nominal outer dia pipes	Metre	100.000	232.07	23,207.22
141.2	18.9.2	20 mm nominal outer dia pipes	Metre	100.000	288.58	28,858.31
141.3	18.9.3	25 mm nominal outer dia pipes	Metre	150.000	388.60	58,290.64
141.4	18.9.5	40 mm nominal outer dia pipes.	Metre	154.000	586.29	90,288.30
141.5	18.9.6	50 mm nominal outer dia pipes	Metre	258.000	851.18	2,19,603.41
141.6	18.9.8	80 mm nominal dia Pipes	Metre	208.000	2,086.81	4,34,057.52
141.7	18.9.9	100 mm nominal inner dia pipes	Metre	316.000	2,947.95	9,31,552.57
142.	18.11	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :				
142.1	18.11.1	15 mm dia nominal bore	Metre	100.000	508.70	50,870.31
143.	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.				
143.1	18.12.6	50 mm dia nominal bore	Metre	50.000	685.89	34,294.47

<b>Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
143.2	18.12.8	80 mm dia nominal bore	Metre	50.000	963.62	48,181.06
144.	18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
144.1	18.13.2	50 to 80 mm nominal bore	Each	2.000	1,587.02	3,174.05
145.	18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
145.1	18.17.4	50 mm nominal bore	Each	11.000	920.79	10,128.72
145.2	18.17.5	65 mm nominal bore	Each	9.000	1,562.91	14,066.19
145.3	18.17.6	80 mm nominal bore	Each	9.000	2,335.50	21,019.54
146.	18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
146.1	18.18.1	15 mm nominal bore	Each	38.000	365.75	13,898.44
147.	18.19	Providing and fixing gun metal non-return valve of approved quality (screwed end) :				
147.1	18.19.3	40 mm nominal bore				
147.1.1	18.19.3.1	Horizontal	Each	6.000	854.53	5,127.19
147.1.1.1	18.19.3.2	Vertical	Each	6.000	1,100.02	6,600.14
147.2	18.19.4	50 mm nominal bore				
147.2.1	18.19.4.1	Horizontal	Each	6.000	1,230.50	7,383.01
147.2.1.1	18.19.4.2	Vertical	Each	6.000	1,384.78	8,308.68
147.3	18.19.5	65 mm nominal bore				
147.3.1	18.19.5.1	Horizontal	Each	6.000	2,195.22	13,171.34

<b>Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
147.3.1.1	18.19.5.2	Vertical	Each	6.000	2,230.29	13,381.76
147.4	18.19.6	80 mm nominal bore				
147.4.1	18.19.6.1	Horizontal	Each	6.000	3,286.65	19,719.90
147.4.1.1	18.19.6.2	Vertical	Each	6.000	3,707.44	22,244.65
148.	18.21	Providing and fixing uplasticised PVC connection pipe with brass unions:				
148.1	18.21.2	45 cm length				
148.1.1	18.21.2.1	15 mm nominal bore	Each	140.000	89.33	12,505.79
149.	18.31	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately) :				
149.1	18.31.4	200 mm diameter				
149.1.1	18.31.4.1	Class I	Each	23.000	12,171.86	2,79,952.88
150.	18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
150.1	18.46.1	15 mm nominal bore	Each	10.000	275.01	2,750.06
150.2	18.46.2	20 mm nominal bore	Each	10.000	303.05	3,030.52
150.3	18.46.3	25 mm nominal bore	Each	10.000	387.24	3,872.41
150.4	18.46.5	40 mm nominal bore	Each	5.000	548.54	2,742.72
150.5	18.46.6	50 mm nominal bore	Each	5.000	740.93	3,704.66
150.6	18.46.7	65 mm nominal bore	Each	2.000	1,042.52	2,085.03
150.7	18.46.8	80 mm nominal bore	Each	2.000	1,112.66	2,225.31

<b>Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
151.	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Litre	40,000.000	11.53	4,61,313.60
152.	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931.				
152.1	18.49.1	15 mm nominal bore	Each	73.000	455.23	33,231.98
153.	18.50	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.				
153.1	18.50.1	15 mm nominal bore	Each	20.000	749.69	14,993.74
154.	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
153.1	18.51.1	15 mm nominal bore	Each	51.000	742.71	37,878.46
155.	18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
155.1	18.52.1	15 mm nominal bore	Each	53.000	623.56	33,048.66
156.	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
156.1	18.53.1	15 mm nominal bore	Each	20.000	524.59	10,491.74

<b>Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
157.	18.53A	Providing and fixing C.P. Brass extension nipple (size 15mmx50mm) of approved make and quality as per direction of Engineer-in-charge.	Each	20.000	64.69	1,293.77
158.	18.54	Providing and fixing PTMT bib cock of approved quality and colour.				
158.1	18.54.1	15 mm nominal bore, 86 mm long, weighing not less than 88 gms	Each	4.000	115.17	460.68
159.	18.55	Providing and fixing PTMT stop cock of approved quality and colour.				
159.1	18.55.3	Concealed stop cock, 15 mm nominal bore, 108 mm long, weighing not less than 108 gms	Each	4.000	192.28	769.14
160.	18.56	Providing and fixing PTMT pillar cock of approved quality and colour.				
160.1	18.56.2	15 mm nominal bore, 125 mm long foam flow, weighing not less than 120 gms	Each	11.000	203.55	2,239.10
161.	18.57	Providing and fixing PTMT, push cock of approved quality and colour.				
161.1	18.57.1	15 mm nominal bore, 98 mm long, weighing not less than 75 gms	Each	4.000	101.12	404.49
162.	18.58	Providing and fixing PTMT grating of approved quality and colour.				
162.1	18.58.1	Circular type				
162.1.1	18.58.1.1	100 mm nominal dia	Each	71.000	39.42	2,798.92
162.1.1.1	18.58.1.2	125 mm nominal dia with 25 mm waste hole	Each	71.000	54.36	3,859.67



<b>Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
163.	18.71	Providing and laying Double Flanged (screwed / welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536)				
163.1	18.71.3	200 mm dia C.I. Double Flanged Pipe	Metre	100.000	5,237.85	5,23,784.90
164.	18.74	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.				
164.1	18.74.2	15 mm nominal bore with 45 cm length	Each	80.000	113.13	9,050.13
165.	18.75	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.				
165.1	18.75.1	15 mm nominal bore, weighing not less than 32 gms	Each	40.000	45.14	1,805.41
166.	18.84	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology.				
166.1	18.84.1	15 mm nominal bore	Each	77.000	8,440.47	6,49,915.90
<b>Total Estimated Value of Sub-Schedule 'A13': WATER SUPPLY WORKS</b>						<b>50,59,469.65</b>

**5.1.13 Sub-Schedule 'A14': DRAINAGE WORKS**

<b>Sub-Schedule 'A14': DRAINAGE WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
167.	19.1	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :				
167.1	19.1.2	150 mm diameter	Metre	100.000	620.05	62,004.74
167.1.1	19.1.3	200 mm diameter	Metre	38.000	870.62	33,083.73
167.1.1.1	19.1.5	300 mm diameter	Metre	38.000	1,860.46	70,697.36
168.	19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :				
168.1	19.2.2	150 mm diameter S.W. pipe	Metre	140.000	1,148.20	1,60,747.87
168.1.1	19.2.3	200 mm diameter S.W. pipe	Metre	68.000	1,338.54	91,020.95
169.	19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design:				
169.1	19.4.2	150 x 100 mm size P type				
169.1.1	19.4.2.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	28.000	2,594.26	72,639.28

<b>Sub-Schedule 'A14': DRAINAGE WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
170.	19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				
170.1	19.6.3	250 mm dia. R.C.C. pipe	Metre	140.000	850.44	1,19,061.89
170.2	19.6.4	300 mm dia R.C.C. pipe	Metre	140.000	945.75	1,32,404.34
170.3	19.6.5	450 mm dia R.C.C. pipe	Metre	140.000	1,553.32	2,17,464.28
171.	19.7	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
171.1	19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg)				

<b>Sub-Schedule 'A14': DRAINAGE WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
171.1.1	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	16.000	12,253.22	1,96,051.57
172.	19.11	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :				
172.1	19.11.1	1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :				
172.1.1	19.11.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	12.000	24,063.74	2,88,764.91

<b>Sub-Schedule 'A14': DRAINAGE WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
173.	19.12	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m :				
173.1	19.12.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Metre	5.600	9,507.62	53,242.68
174.	19.15	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :				
174.1	19.15.1	With 20x20 mm square bar	Each	140.000	483.70	67,717.69
175.	19.21	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :				
175.1	19.21.2	For pipes 250 to 300 mm diameter	Each	12.000	716.82	8,601.82
176.	19.32	Making soak pit 2.5 m diameter 3.0 metre deep with 45 x 45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100 mm diameter, 1.8 m long complete as per standard design.				
176.1	19.32.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	6.000	29,386.88	1,76,321.29

<b>Sub-Schedule 'A14': DRAINAGE WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
177.	19.35	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete				
177.1	19.35.1	450 mm dia RCC pipes.	Metre	85.000	2,501.05	2,12,589.56
178.	19.36	Providing and laying Non Pressure NP-4 class (Heavy duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete				
178.1	19.36.1	450 mm dia RCC pipes.	Metre	85.000	2,851.76	2,42,399.33
<b>Total Estimated Value of Sub-Schedule 'A14': DRAINAGE WORKS</b>						<b>22,04,813.29</b>

**5.1.14 Sub-Schedule 'A15': ALUMINIUM WORKS**

<b>ALUMINIUM WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
179.	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / panelling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, panelling and dash fasteners to be paid for separately) :				
179.1	21.1.1	For fixed portion				
179.1.1	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	9,751.735	488.89	47,67,501.93
179.2	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
179.2.1	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	778.065	592.16	4,60,737.89

<b>ALUMINIUM WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
180.	21.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
1801	21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	Sqm	304.455	1,011.85	3,08,062.59
181.	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
181.1	21.3.2	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	889.408	1,389.76	12,36,063.34
181.2	21.3.3	With float glass panes of 8 mm thickness (weight not less than 20 kg/sqm)	Sqm	410.168	1,568.62	6,43,398.91
182.	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and				



<b>ALUMINIUM WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
182.1	21.4.2	With brass cover plate minimum 1.25 mm thickness	Each	35.400	2,735.80	96,847.30
183.	21.9	Extra for applying additional anodic coating AC 25 instead of AC 15 to aluminium extruded sections.				
183.1	21.9.1	For fixed portion	Kg	9,751.735	14.05	1,37,003.06
183.2	21.9.2	For shutters of doors, windows & ventilators	Kg	778.065	14.05	10,931.10
184.	21.13	Providing and fixing Brass 100mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	Each	12.000	471.33	5,655.91
185.	21.15	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete				
185.1	21.15.2	Powder coated minimum thickness 50 micron aluminium	Each	1,420.000	83.61	1,18,730.59
186.	21.16	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge				
186.1	21.16.2	Powder coated minimum thickness 50 micron aluminium	Each	12.000	93.94	1,127.28

<b>ALUMINIUM WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
187.	21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	Kg	173.000	588.02	1,01,727.04
188.	21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double acting hydraulic floor spring type fixing arrangement and making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock and stopper etc.to be paid separately	Sqm	136.000	4,760.65	6,47,448.61
189.	21.19	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/ structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540-F & ISO 11600				
189.1	21.19.1	Upto 5 mm depth and 5 mm width	Metre	482.000	136.51	65,796.32
189.2	21.19.2	Upto 10 mm depth and 10 mm width	Metre	200.000	185.57	37,114.78

<b>ALUMINIUM WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Item</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>Total Estimated Value of Sub-Schedule 'A15': ALUMINIUM WORKS</b>						<b>86,38,146.65</b>

**5.1.15 Sub-Schedule 'A16': MISCELLANEOUS WORKS**

<b>Sub-Schedule 'A16': MISCELLANEOUS WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
190.	22.5	<p>Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying:</p> <p>(a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. This layer will be allowed to air cure for 4 hours.</p> <p>(b) Second layer of slurry of cement @ 0.242 kg/sqm mixed with water proofing cement compound @ 0.126 kg/sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours.</p> <p>The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.</p>	Sqm	39.800	541.62	21,556.64
191.	22..7	<p>Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25</p>				

<b>Sub-Schedule 'A16': MISCELLANEOUS WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in order and as directed and specified by the Engineer-in-Charge":				
191.1	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	1,113.400	1,596.72	17,77,789.94

<b>Sub-Schedule 'A16': MISCELLANEOUS WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
192.	22.23	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservoir, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage.				
192.1	22.23.1	For vertical surface two coats @0.70 kg per sqm	Sqm	100.000	425.93	42,592.88
192.2	22.23.2	For horizontal surface one coat @1.10 kg per sqm.	Sqm	100.000	326.59	32,658.91
<b>Total Estimated Value of Sub-Schedule 'A15': Miscellaneous Works</b>						<b>18,74,598.37</b>

**5.1.16 Sub-Schedule 'A17': RAIN WATER HARVESTING WORKS**

<b>Sub-Schedule 'A17': RAIN WATER HARVESTING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
193.	23.1	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipment's, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge, upto 90 metre depth below ground level.				
193.1	23.1.1	All types of soil				
193.1.1	23.1.1.1	300 mm dia	Metre	290.000	620.73	1,80,011.38
193.2	23.1.2	Rocky strata including Boulders				
193.2.1	23.1.2.1	300 mm dia	Metre	190.000	1,484.91	2,82,132.06
194.	23.2	Boring/drilling bore well of required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/ bore log, including hire & running charges of all equipment's, tools, plants & machineries required for the job, all complete as per direction of Engineer -in-charge, beyond 90 metre & upto 150 metre depth below ground level.				
194.1	23.2.1	All types of soil				
194.1.1	23.2.1.1	300 mm dia	Metre	170.000	724.16	1,23,106.78

<b>Sub-Schedule 'A17': RAIN WATER HARVESTING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
195.	23.3	Supplying, assembling, lowering and fixing in vertical position in bore well, unplasticized PVC medium well casing (CM) pipe of required dia, conforming to IS: 12818, including required hire and labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer -in-charge.				
195.1	23.3.2	150 mm nominal size dia	Metre	200.000	700.88	1,40,176.43
196.	23.4	Supplying, assembling, lowering and fixing in vertical position in bore well unplasticized PVC medium well screen (RMS) pipes with ribs, conforming to IS: 12818, including hire & labour charges, fittings & accessories etc. all complete, for all depths, as per direction of Engineer-in-charge.				
196.1	23.4.2	150 mm nominal size dia	Metre	200.000	714.93	1,42,986.25
197.	23.5	Supplying, filling, spreading & levelling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	Cum	7.356	1,365.38	10,044.03
198.	23.7	Supplying, filling, spreading & levelling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -in-charge.	Cum	7.356	1,372.41	10,095.70
199.	23.8	Gravel packing in tubewell construction in accordance with IS: 4097, including providing ravel fine/ medium/ coarse, in	Cum	12.712	1,550.90	19,715.71



<b>Sub-Schedule 'A17': RAIN WATER HARVESTING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		required grading & sizes as per actual requirement, all complete as per direction of Engineer-in-charge.				
200.	23.9	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000 x 450x50 mm, reinforced with 8 mm dia four nos longitudinal & 9 nos cross sectional T.M.T. hoop bars, including providing 50 mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50 mm x 1.6 mm complete, all as per direction of Engineer-in-charge.	Each	6.000	1,272.02	7,632.12
201.	23.11	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed/ plain bevel ended pipe (type A) of required dia, conforming to IS: 8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer -in-charge.				
201.1	23.11.2	150 mm nominal size dia	Metre	280.000	1,876.71	5,25,478.13
202.	23.12	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required	Hour	320.000	961.21	3,07,587.13

<b>Sub-Schedule 'A17': RAIN WATER HARVESTING WORKS</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.				
203.	23.13	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of:				
203.1	23.13.2	150 mm dia	Each	6.000	220.96	1,325.75
204.	23.14	Providing and fixing M.S. clamp of required dia to the top of casing/ housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts of required size complete.				
204.1	23.14.2	150 mm clamp	Each	6.000	1,687.20	10,123.21
205.	23.15	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I).				
205.1	23.15.2	150 mm dia	Each	8.000	295.40	1,181.59
<b>Total Estimated Value of Sub-Schedule 'A17': Rain Water Harvesting Works</b>						<b>17,61,596.27</b>

**5.1.17 Sub-Schedule 'A18': STRUCTURAL GLAZING WORKS/False Ceiling Works**

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
206.	25.1	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings , the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. ( The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account). The weight of aluminium extruded section shall be taken for purpose of payment.	kg	2,820.000	388.39	10,95,272.77
207.	25.2	Designing, fabricating, testing, protection, installing and fixing in position semi (grid) unitized system of structural glazing (with open joints) for linear as well as curvilinear portions of the building for all heights and all levels, including:	Sqm	470.000	3,262.06	15,33,169.98
		(a) Structural analysis & design and preparation of shop drawings for the specified design loads conforming to IS 875 part III (the system must passed the proof test at 1.5 times design wind pressure without any failure), including functional design of the aluminium sections for fixing glazing panels of various thicknesses, aluminium cleats, sleeves and splice plates etc. gaskets, screws, toggles, nuts, bolts, clamps etc., structural and weather silicone sealants, flashings, fire stop (barrier) cum-				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		smoke seals, microwave cured EPDM gaskets for water tightness, pressure equalisation & drainage and protection against fire hazard including:				
		(b) Fabricating and supplying serrated M.S. hot dip galvanised / Aluminium alloy of 6005 T5 brackets of required sizes, sections and profiles etc. to accommodate 3 Dimensional movement for achieving perfect verticality and fixing structural glazing system rigidly to the RCC/ masonry/structural steel framework of building structure using stainless steel anchor fasteners/ bolts, nylon separator to prevent bimetallic contacts with nuts and washers etc. of stainless steel grade 316, of the required capacity and in required numbers.				
		(c) Providing and filling, two part pump filled, structural silicone sealant and one part weather silicone sealant compatible with the structural silicone sealant of required bite size in a clean and controlled factory / work shop environment, including double sided spacer tape, setting blocks and backer rod, all of approved grade, brand and manufacture, as per the approved sealant design, within and all around the perimeter for holding glass.				
		(d) Providing and fixing in position flashings of solid aluminium sheet 1 mm thick and of sizes, shapes and profiles, as required as per the site conditions, to seal the gap between the building structure and all its interfaces with curtain glazing to make it watertight.				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		(e) Making provision for drainage of moisture/ water that enters the curtain glazing system to make it watertight, by incorporating principles of pressure equalization, providing suitable gutter profiles at bottom (if required), making necessary holes of required sizes and of required numbers etc. complete. This item includes cost of all inputs of designing, labour for fabricating and installation of aluminium grid, installation of glazed units, T&P, scaffolding and other incidental charges including wastages etc., enabling temporary structures and services, cranes or cradles etc. as described above and as specified.				
		The item includes the cost of getting all the structural and functional design including shop drawings checked by a structural designer, dully approved by Engineer-in-charge. The item also includes the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working structural glazing as specified, cleaning and protection till the handing over of the building for occupation. In the end, the Contractor shall provide a water tight structural glazing having all the performance characteristics etc. all complete as required, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer- in-Charge.				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		Note:- 1. The cost of providing extruded aluminium frames, shadow boxes, extruded aluminium section capping for fixing in the grooves of the curtain glazing and vermin proof stainless steel wire mesh shall be paid for separately under relevant items under this sub- head. However, for the purpose of payment, only the actual area of structural glazing (including width of grooves) on the external face shall be measured in sqm. up to two decimal places.				
		Note:-2. The following performance test are to be conducted on structural glazing system if area of structural glazing exceeds 2500 Sqm from the certified laboratories accredited by NABL(National Accreditation Board for Testing and Calibration Laboratories), Department of Science & Technologies, India. Cost of testing is payable separately.				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		The NIT approving authority will decide the necessity of testing on the basis of cost of the work, cost of the test and importance of the work. Performance Testing of Structural glazing system Tests to be conducted in the NABL accredited lab or any other accreditation body which operates in accordance with ISO/IEC 17011 and accredits labs as per ISO/IEC 17025 1. Performance Laboratory Test for Air Leakage Test (- 50pa to - 300pa) & (+50pa to +300pa) as per ASTM E-283-04 testing method for a range of testing limit 1 to 200 mVhr 2. Static Water Penetration Test. (50pa to 1500pa) as per ASTM E- 331-09 testing method for a range up to 2000 ml. 3. Dynamic Water Penetration (50pa to 1500pa) as per AAMA 501.01- 05 testing method for a range upto 2000 ml 4. Structural Performance Deflection and deformation by static air pressure test (1.5 times design wind pressure without any failure) as per ASTM E-330-10 testing method for a range upto 50 mm 5. Seismic Movement Test (upto 30 mm) as per AAMA 501.4-09 testing method for Qualitative test, Tests to be conducted on site. 6. Onsite Test for Water Leakage for a pressure range 50 kpa to 240 kpa (35psi) upto 2000 ml				
208.	25.3	Providing, assembling and supplying vision glass panels (IGUs) comprising of hermetically-sealed 6-12- 6 mm insulated glass (double glazed) vision panel units of size and shape as required and specified, comprising of an outer heat strengthened float glass 6 mm thick, of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade, an inner Heat strengthened clear float glass 6	Sqm	470.000	3,541.11	16,64,319.87

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		mm thick, spacer tube 12 mm wide, desiccants, including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances, as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor				
		(Payment for fixing of IGU Panels in the curtain glazing is included in cost of item No.25.2) For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. (i) Coloured tinted float glass 6 mm thick substrate with reflective soft coating on face # 2, + 12 mm Airgap + 6 mm Heat Strengthened clear Glass of approved make having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 degree K etc. The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.				
209.	25.4	Extra for openable side / top hung vision glass panels (IGUs) including providing and supplying at site all accessories and hardware for the openable panels as specified and of the approved make such as heavy duty stainless steel friction hinges, min 4 -point cremone locking sets with stainless steel plates, handles, buffers etc. including necessary stainless	Sqm	94.000	3,469.34	3,26,118.00



<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
		steel screws/ fasteners, nuts, bolts, washers etc. all complete as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer- in-Charge.				
210.	25.6	Providing and supplying Spandrel Glass Panels comprising of 6 mm thick heat strengthened monolithic float glass of approved colour and shade with reflective soft coating on surface # 2 of approved colour and shade so as to match the colour and shade of the IGUs in the vision panels etc. ,all complete for the required performances as specified, as per the Architectural drawings, as per the approved shop drawings, as specified, and as directed by the Engineer- in- Charge.	Sqm	200.000	2,320.72	4,64,144.39
		For payment, only the actual area of glass on face # 1 of the glass panels (but excluding the area of grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. (Payment for fixing of Spandrel Glass Panels in the curtain glazing is included in cost of relevant Item*)."(i) Coloured tinted float glass 6 mm thick substrate with reflective soft coating on face # 2, having properties as visible Light transmittance (VLT) of 25 to 35 %, Light reflection internal 10 to 15%, light reflection external 10 to 20 %, shading coefficient (0.25- 0.28) and U value of 3.0 to 3.3 W/m2 K etc. . The properties of performance glass shall be decided by technical sanctioning authority as per the site requirement.				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
211.	25.8	Design supply & installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/ beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof	Sqm	20.000	8,628.71	1,72,574.27
		The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured.				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
212.	26.23	Providing and fixing false ceiling at all heights with integral densified calcium silicate reinforced with fibre and natural filler false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having NRC (Noise Reduction coefficient) of 0.50 (minimum) as per IS 8225:1987, Light reflectance of 85% (minimum). Non combustible as per BS:476 (part-4), fire performance as per BS:476 (part 6 &7), humidity resistance of 100%, thermal conductivity < 0.043 W/m K as per ASTM 518:1991, in true horizontal level suspended on inter-locking metal powder coated T-Grid of hot dipped galvanised iron section of 0.40 mm thick on Silhouette profile, rotary stitched double webbed white with 6mm reveal profile (white/ black),comprising of main-T runners of size 15x42mm of length 3000 mm, cross - T of size 15x42 mm of length 1200 mm and secondary intermediate cross-T of size 15x42 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 22x19x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40mm long dry wall S.S screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge.				

<b>Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works</b>						
<b>S. No.</b>	<b>DSR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
213.	26.23.1	With 15 mm thick integral densified micro edge light weight calcium silicate false ceiling tiles	Sqm	1,970.000	2,155.23	42,45,794.60
<b>Total Amount of Sub-Schedule 'A18': Structural Glazing Works/False Ceiling Works/False Ceiling Works</b>						<b>95,01,393.88</b>

**5.1.18 Sub-Schedule 'A19': Horticulture & Landscaping Works**

<b>Sub-Schedule 'A19' Horticulture &amp; Landscaping Works</b>						
<b>S. No.</b>	<b>DSR Item No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>QTY</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
214.		Item of Horticulture and landscaping of Delhi Schedule of Rates (Horticulture & Landscaping-2020)	LS	-	-	5,00,000.00
<b>Total Amount of Sub-Schedule 'A19': Horticulture &amp; Landscaping Works</b>						<b>5,00,000.00</b>

**5.1.19 Sub-Schedule 'A20': DSR-Miscellaneous Works**

<b>DSR Miscellaneous WORKS</b>						
<b>S. No.</b>	<b>DSR Item No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
215.	-	Any other items of DSR -2021 not covered in this schedule	LS	-	-	10,00,000.00
<b>Total Amount of Sub-Schedule 'A20':DSR Miscellaneous Works</b>						<b>10,00,000.00</b>

**5.1.20 Sub-Schedule 'A21': GEO TECHNICAL WORKS**

<b>Sub-Schedule 'A21': GEO TECHNICAL WORKS</b>						
<b>S. No.</b>	<b>IRUSSOR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
216.	021010	Exploratory drilling of boreholes down to required depth, drilling of 150mmdia. boreholes in all type of soils except hard rock& large boulders (boulder core more than 30cm) including refilling, reinstating surface and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion/chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area.				
216.1	021011	0m to 10m	Metre	50.000	559.87	27,993.64
216.2	021012	10m to 20m	Metre	25.000	576.20	14,405.01
217.	021060	Conducting in-situ full size Plate Load Test (PLT) at selected location as per IS:1888 including making loading arrangements & casting of RCC/cast in-situ concrete footing as per codal provisions including excavation and refilling of trial pit.				
217.1	021062	Plate size 45cm x 45cm	Each	5.000	12,808.75	64,043.76
218.	021130	Conducting standard penetration test as per IS:2131 at approximate 3.0 m intervals in bore holes, as directed by the Engineer in charge	Each	20.000	90.25	1,804.91
219.	021150	Conducting laboratory Tests on collected soil samples as per relevant IS code				
219.1	021151	Moisture Content/Dry Density	Each	30.000	319.25	9,577.56
219.2	021152	Atterberg Limits	Each	30.000	433.12	12,993.52
219.3	021153	Specific Gravity	Each	30.000	272.85	8,185.40

<b>Sub-Schedule 'A21': GEO TECHNICAL WORKS</b>						
<b>S. No.</b>	<b>IRUSSOR No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
219.4	021154	Grain size analysis including Hydrometer analysis	Each	30.000	332.14	9,964.27
219.5	021155	Direct Shear Test	Each	15.000	1,526.14	22,892.04
220.	021170	Conducting chemical analysis of ground water samples to determine suitability for concreting and aggressiveness in relation to attack on concrete / reinforcement including determination of pH value.	Each	1.000	892.01	892.01
<b>Total Amount of Sub-Schedule 'A21': Geo-Technical Works</b>						<b>1,72,752.12</b>



## 5.1.21 Sub-Schedule 'A22': NS ITEMS

Sub-Schedule 'A22': NS Items						
S. No.	IRUSSO R/ NS No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
221.	<b>011010</b>	Earthwork in cutting (classified) in formation, trolley refuges, side drains, level crossing approaches, platforms, catch water drains, diversion of nallah & finishing to required dimension and slopes to obtain a neat appearance to standard profile inclusive of all labour, machine & materials and removing & leading all cut spoils either to make spoil dumps beyond 10m from cutting edge or for filling in embankment with leads within 2 km on either side of cutting edge, lifts, ascent, descent, loading, unloading, all taxes / royalty, clearance of site and all incidental charges, bailing & pumping out water, if required, etc. complete as per directions of the Engineerin-Charge. The work is to be executed as per latest / updated edition of "Guidelines for Earthwork in Railway Projects" issued by RDSO, Lucknow. Cut trees shall be property of HRIDC and to be deposited in the Employers' godown unless specified otherwise in the Special Conditions of Contract. {Note - (i) All usable earth arising from cut spoils shall be led into bank formation and Unusable spoils shall be dumped / stacked (ii) All hard rock /and boulders not fit for filling will be stacked by the contractor and will be property of HRIDC.}				
221.1	<b>011011</b>	In all conditions and classifications of soil except rock	Cum	15,000.000	202.26	30,33,900.00

Sub-Schedule 'A22': NS Items						
S. No.	IRUSSO R/ NS No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
222.	NS-1	Granite work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (vener work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).				
222.1	NS-1.1	Granite of any colour and shade				
222.1.1	NS-1.1.1	Area of slab upto 0.50 sqm	Sqm	178.380	7,451.52	13,29,199.89
222.1.2	NS-1.1.2	Area of slab over 0.50 sqm	Sqm	267.569	7,790.74	20,84,564.62
223.	NS-2	Earthwork in filling with contractor's own earth of approved quality from borrow areas including all lead all lead, lift, ascent, descent, royalty, taxes, cess, compensation, crossing of nallahs /stream and other obstructions including mechanical compaction in layers with watering to 95% of MDD (as per IS 2720 part 8), handling, re-handling, dressing to the final profile with all labour, material, tools, plant, machinery and equipment, taxes, cess etc. as a complete job in accordance with the specification and drawings Note:- This item will be used for earthwork in filling for other than railway embankment work.	Cum	30,000.000	265.55	79,66,500.00

<b>Sub-Schedule 'A22': NS Items</b>						
<b>S. No.</b>	<b>IRUSSO R/ NS No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
224.	NS-3	Providing & fixing in position oval shape (over Counter) model 1005 basin 550x 460 mm Cera or equivalent approved make with fitting with bracket and cutting and making good the wall floor etc. wherever required including making necessary moulding and grooves for fixing wash basin on granite counter as directed by Engineer-in-charge. The item includes cost of supply and making connection with supply pipe, bottle trap and waste disposal pipe.	Each	30.000	4,504.91	1,35,147.17
225.	NS-4	Design of Station building (G+5) building structure as shown in tender drawing and preparation of detailed drawings, showing floor plans, Architectural front, back and side elevation & section ,Parking facilities and sectional details showing reinforcement details of RCC footings, columns, beams, slabs, chhajaas etc. complete as per HRIDC requirement including development of room wise material specification, Door-windows, Fittings & fixtures detailing, Plumbing works detailing, Staircase detailing, Internal wall detailing, Toilet detailing etc., interior finishing & design, PHE drawings, HVAC drawings, Rain water harvesting details with contractor's own tools & plan, consumables etc. complete on original re-produceable tracing film of thickness minimum 75 microns double matt type on A1/A0 size as per direction of Engineer-in-charge.	Sqm	2,718.060	174.97	4,75,568.40

Sub-Schedule 'A22': NS Items						
S. No.	IRUSSO R/ NS No.	Description of Items	Unit	Quantity	Estimated Rate (INR)	Estimated Amount (INR)
226.	NS-5	Design of Electrical, S&T and Track maintenance offices (G+4) building structure as shown in Tender drawing and preparation of detailed drawings, showing floor plans, Architectural front, back and side elevation & section , Parking facilities and sectional details showing reinforcement details of RCC footings, columns, beams, slabs, chhajaas etc. complete as per HRIDC requirement including development of room wise material specification, Door-windows, Fittings & fixtures detailing, Plumbing works detailing, Staircase detailing, Internal wall detailing, Toilet detailing etc. interior finishing & design, PHE drawings, Rain water harvesting details with contractor's own tools & plan, consumables etc. complete on original re-produceable tracing film of thickness minimum 75 microns double matt type on A1/A0 size as per direction of Engineer-in-charge.	Sqm	2,174.448	174.97	3,80,454.72
227.	NS-6	Land scaping of Manesar Station area and preparation of drawings showing Traffic flow pattern, parking including horticulture planning etc. complete on original re-produceable tracing film of thickness minimum 75 microns double matt type on A1/A0 size as per direction of Engineer-in-charge.	Sqm	10,000.000	34.99	3,49,932.23

<b>Sub-Schedule 'A22': NS Items</b>						
<b>S. No.</b>	<b>IRUSSO R/ NS No.</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Estimated Rate (INR)</b>	<b>Estimated Amount (INR)</b>
228.	NS-7	Design of interior works of IMD (G+5) building as shown in tender drawing and preparation of detailed drawings of interior works like false ceiling, internal walls & partition walls, Doors & windows, Toilets, Kitchen & Pantry, staircase, other fittings & fixtures etc., Room wise material specifications, preparation of architectural elevation & sections, interior finishes, design of terrace parapet wall, Firefighting system, Plumbing works, PHE drawings, HVAC drawings, Rain water harvesting and other associated works complete with contractor's own tools & plan, consumables etc. complete on original re-produceable tracing film of thickness minimum 75 microns double matt type on A1/A0 size as per direction of Engineer-in-charge.	Sqm	2,750.000	87.48	2,40,578.41
229.	NS-8	Design of under-ground water storage tank of 3,00,000 liter capacity divided in two equal parts with cover slab & opening for drinking water & fire fighting and preparation of detailed drawings with contractor's own tools & plan, consumables etc. complete on original re-produceable tracing film of thickness minimum 75 microns double matt type on A1/A0 size as per direction of Engineer-in-charge.	Sqm	144.000	174.97	25,195.12
<b>Total Estimated Value of Sub-Schedule 'A22': NS/USSOR Works</b>						<b>1,60,21,040.56</b>

**Total Estimated Amount of Schedule 'A'- 31,02,69,112.90**

## 5.2 Schedule 'B' consists of items for execution of General Electrical Services

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>1</b>	<b>CONDUITS, WIRING, PLUGS, FAN AND DISTRIBUTION BOARDS ETC.</b>				
1.1	Point Wiring By 3x2.5 sqmm Copper Cable (With Modular Switches & Socket) in laid Conduits.	Nos	858	462.58	3,96,893.64
1.2	Point Wiring By 3x2.5 sqmm Copper Cable (With Modular Switches & Socket) with concealed FRLS PVC Conduits.	Nos	482	598.30	2,88,380.60
1.3	Supply of Material and Installation of 3x2.5 Sqmm Copper Cable along with FRLS PVC Conduits.	m	6870	88.59	6,08,613.30
1.4	Supply of Material and Installation of 3x6 Sqmm Copper Cable along with FRLS PVC Conduits.	m	2800	149.94	4,19,832.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1.5	Supply and Installation of 6A Modular Switch Socket.	Nos	1308	259.68	3,39,661.44
1.6	Supply and Installation of 16A Modular Power Switch Socket.	Nos	204	287.28	58,605.12
1.7	Supply and Installation of 02 Module Plate with GI Box.	Nos	142	111.65	15,854.30
1.8	Supply and Installation of 04 Module Plate with GI Box.	Nos	197	154.30	30,397.10
1.9	Supply and Installation of 08 Module Plate with GI Box.	Nos	292	265.95	77,657.40
1.10	Supply and Installation of 12 Module Plate with GI Box.	Nos	20	286.03	5,720.60
1.11	Supply, Installation, Testing and Commissioning of BLDC energy efficient ceiling fan 1200 mm sweep with fan regulator.	Nos	103	2701.48	2,78,252.44
1.12	Supply, Installation, Testing and Commissioning of BLDC energy efficient ceiling fan 1400 mm sweep with fan regulator.	Nos	62	4320.00	2,67,840.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1.13	Supply, Installation, Testing and Commissioning of 300 mm Sweep Exhaust Fan.	Nos	62	1658.00	1,02,796.00
1.14	Supply, Installation, Testing and Commissioning of Double Door, Distribution Boards (DB) with 63A MCB TPN, 440V, 8 Module.	Nos	24	22476.22	5,39,429.28
1.15	Supply, Installation, Testing and Commissioning of Double Door, Distribution Boards (DB) with 40A MCB TPN, 440V, 8 Module.	Nos	12	20432.93	2,45,195.16
1.16	Supply, Installation, Testing and Commissioning of Double Door, Distribution Board (DB) with DP MCB, 40A, 12 Way, SP.	Nos	21	9610.50	2,01,820.50
1.17	Supply, Installation, Testing and Commissioning of 440V, 3-phase Change Over Distribution Board.	Nos	1	26473.56	26,473.56
1.18	Supply, Installation, Testing and Commissioning of Double Door, Distribution Board with 63A, 240V, DP MCB, 8 Way, SP.	Nos	11	6066.98	66,736.78



<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1.19	Supply and Installation of Metal Clad Plug Socket 20A, 240V, Single Phase with 32A, DP MCB with enclosure.	Nos	12	1121.52	13,458.24
1.20	Supply and Installation of Metal Clad Plug Socket 16A, 240V, Single Phase with 20A, DP MCB with enclosure.	Nos	4	897.22	3,588.88
1.21	Supply, Installation, Testing and Commissioning of MCCB 200A, 440V, 3-phase (4 Pole, 36 KA) with enclosure.	Nos	9	21257.48	1,91,317.32
1.22	Supply and Installation of Junction Box Size 390(H)x305(B)x170(D) mm with busbar.	Nos	12	3119.47	37,433.64
1.23	Supply, installation, testing and commissioning of 25 mm dia GI Conduit.	m	400	150.09	60,036.00
1.24	Supply, installation, testing and commissioning of 32 mm dia GI Conduit.	m	1100	192.12	2,11,332.00
1.25	Supply of Material and Installation of FRLS PVC, 1.1 kV, 3x2.5 Sqmm Copper Cable.	m	600	86.50	51,900.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1.26	Supply of Material and Installation of FRLS PVC, 1.1 kV, 3x6 Sqmm Copper Cable.	m	450	129.75	58,387.50
1.27	Supply of Material and Installation of FRLS PVC, 1.1 kV, 3x10 Sqmm Copper Cable.	m	250	173.00	43,250.00
<b>2</b>	<b>LT &amp; HT CABLES AND LAYING</b>				
2.1	Supply of 2 Core x 10 Sqmm, XLPE insulated, armoured, 1.1 kV Copper Cable.	m	2406	314.58	7,56,879.48
2.2	Supply of 2 Core x 16 Sqmm, XLPE insulated, armoured, 1.1 kV Copper Cable.	m	4150	459.38	19,06,427.00
2.3	Supply of 2 Core x 35 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	1650	172.00	2,83,800.00
2.4	Supply of 2 Core x 70 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	600	297.60	1,78,560.00
2.5	Supply of 2 Core x 95 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	1800	368.00	6,62,400.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
2.6	Supply of FRLSH XLPE insulated, armoured, 3 core x 25 sqmm, 1.1 kV Aluminium cable.	m	60	174.00	10,440.00
2.7	Supply of FRLSH XLPE insulated, armoured, 3 core x 95 sqmm, 1.1 kV Aluminium cable.	m	80	505.20	40,416.00
2.8	Supply of FRLSH XLPE insulated, armoured, 3 core x 120 sqmm, 1.1 kV Aluminium cable.	m	200	615.20	1,23,040.00
2.9	Supply of 4 Core x 16 Sqmm, XLPE insulated, armoured, 1.1 kV Copper Cable.	m	480	871.34	4,18,243.20
2.10	Supply of 4 Core x 25 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	680	216.40	1,47,152.00
2.11	Supply of 4 Core x 50 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	125	389.20	48,650.00
2.12	Supply of 4 Core x 70 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	900	528.80	4,75,920.00
2.13	Supply of 4 Core x 95 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	240	659.20	1,58,208.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
2.14	Supply of 4 Core x 120 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	1100	804.00	8,84,400.00
2.15	Supply of 4 Core x 240 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	250	1570.00	3,92,500.00
2.16	Supply of 4 Core x 300 Sqmm, XLPE insulated, armoured, 1.1 kV Aluminium Cable.	m	300	1935.20	5,80,560.00
2.17	Supply, Installation, Testing and Commissioning of LT Heat Shrinkable Straight Through Joint.	Nos	20	2663.82	53,276.40
2.18	Supply of 3 Core x 120 Sqmm, XLPE insulated, armoured, 11 kV Aluminium Cable.	m	400	1458.00	5,83,200.00
2.19	Supply and Installation of End Termination Kit for 3 core 70 Sqmm to 185 Sqmm, 11 kV Cable.	Nos	16	15134.61	2,42,153.76
2.20	Laying of LT/ HT Cables (All Size) In Air/ Pipe/ Cable Tray/ Trench Etc.	m	14771	48.46	7,15,802.66
2.21	Excavation and Refilling of Trench of size 500 mm wide and depth up to 1200 mm (as per design) for cables.	m	5260	135.35	7,11,941.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
2.22	Excavation and Refilling of Trench of size 500 mm Wide and depth up to 1200 mm with brick protection (as per design) for cables.	m	500	344.65	1,72,325.00
2.23	Supply and Laying of HDPE Pipe (90 mm outside dia).	m	4350	139.21	6,05,563.50
2.24	Supply and Laying of HDPE Pipe (90 mm outside dia) at platform along with pit and cover.	m	1200	153.14	1,83,768.00
2.25	Supply and Laying of HDPE Pipe (125 mm outside dia).	m	2600	481.26	12,51,276.00
2.26	Supply and Laying of HDPE Pipe (160 mm outside dia).	m	500	616.02	3,08,010.00
2.27	Supply and Laying of GI Pipe (nominal bore 150 mm).	m	900	2080.10	18,72,090.00
2.28	Supply and Installation of Cable Route Marker.	Nos	107	2215.71	2,37,080.97
2.29	Drilling of horizontal bore below Railway track or road by pushing method for laying of HDPE/ GI pipe.	m	450	2821.50	12,69,675.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>3</b>	<b>LIGHTING, STREET LIGHT POLE AND HIGH MAST</b>				
3.1	Supply, Installation, Testing and Commissioning of 22 Watt LED Tube Light with fitting.	Nos	415	756.31	3,13,868.65
3.2	Supply, Installation, Testing and Commissioning of 40W LED 2X2 recess mounting luminaire with fitting.	Nos	270	4939.59	13,33,689.30
3.3	Supply, Installation, Testing and Commissioning of 18W recessed type LED downlighter with fitting.	Nos	288	2719.97	7,83,351.36
3.4	Supply, Installation, Testing and Commissioning of 40 Watt LED Street Light with Fitting.	Nos	89	5239.09	4,66,279.01
3.5	Supply, Installation, Testing and Commissioning of 60 Watt LED Street Light with Fitting.	Nos	75	5850.00	4,38,750.00
3.6	Supply, Installation, Testing and Commissioning of 40 Watt LED Light with bulkhead light fitting along with anti-theft provision.	Nos	40	4191.27	1,67,650.80

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
3.7	Supply, Installation, Testing and Commissioning of 120 Watt LED Street Light with Fitting.	Nos	80	9800.00	7,84,000.00
3.8	Supply, Installation, Testing and Commissioning of Rechargeable Batten Type 240 Watt (60 LEDs, 4 watts) Emergency Light.	Nos	2	3245.39	6,490.78
3.9	Supply, Installation, Testing and Commissioning of Outdoor LED Type Flood Light Luminaries (200 Watt) with fitting.	Nos	24	33818.76	8,11,650.24
3.10	Supply, Installation, Testing and Commissioning of 6 meter high hot dip galvanised steel octagonal with single/double arm street light pole with foundation bolt, galvanised base plate complete with foundation (M-25 grade), entry and exit pipes, control junction box with connector etc. complete as per drawing.	Nos	124	18124.53	22,47,441.72

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
3.11	Supply, Installation, Testing and Commissioning of metallic astronomical and pre-settable street light timer.	Nos	13	2368.00	30,784.00
3.12	Supply, Installation, Testing and Commissioning of 20 Meter High Mast.	Nos	2	478500.00	9,57,000.00
<b>4</b>	<b>ELECTRICAL EQUIPMENTS (PUMPS, AIR-CONDITIONERS, UPS, WATER COOLER ETC.)</b>				
4.1	Supply, Installation, Testing and Commissioning of Submersible Pump Set of 1.5 kW, 440V, 3-phase along with Automatic Control Panel.	Nos	1	35659.74	35,659.74
4.2	Supply, Installation, Testing and Commissioning of Submersible Pump Set of 3 kW, 440V, 3-phase along with Automatic Control Panel.	Nos	2	41736.00	83,472.00
4.3	Supply of Submersible Pump Set of 7.5 kW, 440V, 3-phase.	Nos	3	70734.98	2,12,204.94
4.4	Supply, Installation, Testing and Commissioning of Automatic Control Panel for 7.5 kW, 440V, 3- Phase Submersible Pump.	Nos	3	20448.35	61,345.05



<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
4.5	Installation, Testing and Commissioning of Submersible Pump Set of 7.5 kW.	Nos	3	4599.00	13,797.00
4.6	Supply, installation, testing and commissioning of Mono-Block Pump 1.5 kW, 240V, complete with all accessories and control panel.	Nos	4	16285.92	65,143.68
4.7	Supply of Mono Block Pump 3.75 kW, 440V, 3-phase.	Nos	3	24088.58	72,265.74
4.8	Supply, Installation, Testing and Commissioning of Automatic Control Panel with DOL Starter for 3.75 kW, 440V, 3-Phase Pump.	Nos	3	12253.89	36,761.67
4.9	Installation, Testing and Commissioning of 3.75 kW, 440V, 3-phase Mono Block Pump Set.	Nos	3	1785.13	5,355.39
4.10	Supply, Installation, Testing and Commissioning of Mono Block Pump Set of 5.5 kW, 440V, 3-phase along with Automatic Control Panel with DOL starter.	Nos	1	68976.00	68,976.00
4.11	Supply, Installation, Testing and Commissioning of 3 Core, 10 Sqmm Copper Flat Cable.	m	550	101.61	55,885.50

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
4.12	Supply and Installation of G.I. Pipe 40 mm nominal bore Medium Class with bends, fitting bends, sockets, flanges, delivery valve, non-return valve etc. as required.	m	120	281.81	33,817.20
4.13	Supply and Installation of G.I. Pipe 50 mm nominal bore Medium Class with bends, fitting bends, sockets, flanges, delivery valve, non-return valve etc. as required.	m	120	352.26	42,271.20
4.14	Supply and Installation of G.I. Pipe 65 mm nominal bore Medium Class with bends, fitting bends, sockets, flanges, delivery valve, non-return valve etc. as required.	m	120	457.94	54,952.80
4.15	Supply and Installation of G.I. Pipe 80 mm nominal bore Medium Class with bends, fitting bends, sockets, flanges, delivery valve, non-return valve etc. as required.	m	120	563.62	67,634.40
4.16	Supply and Installation of G.I. Pipe 100 mm nominal bore Medium Class with bends, fitting bends, sockets, flanges, delivery valve, non-return valve etc. as required.	m	50	704.53	35,226.50

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
4.17	Supply, Installation, Testing and Commissioning of 32A, 240V, DP MCB with enclosure.	Nos	15	2189.38	32,840.70
4.18	Supply, Installation, Testing and Commissioning of 2 KVA, 240 Volt, AC, Pure Sine Wave Online UPS cum Inverter.	Nos	10	56190.00	5,61,900.00
4.19	Supply, Installation, Testing and Commissioning of Water Cooler (150 Litre).	Nos	16	80401.00	12,86,416.00
4.20	Supply, Installation, Testing and Commissioning of 5 star rated storage geyser 25 litre capacity.	Nos	10	4862.44	48,624.40
4.21	Supply, Installation, Testing and Commissioning of Heavy Duty 5 Star, 1.5 Ton Split Inverter Type Air Conditioner, 240V.	Nos	4	51531.80	2,06,127.20
4.22	Supply, Installation, Testing and Commissioning of Heavy Duty 5 Star, 2 Ton Split Inverter Type Air Conditioner, 240V.	Nos	12	58990.00	7,07,880.00
<b>5</b>	<b>SUBSTATION 11kV/ 0.44 KV, HT PANEL, LT PANEL, APFC PANEL, GENSET AND EARTHING</b>				

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
5.1	Supply, Installation, Testing and Commissioning of 11kV/0.44kV, 1x250 kVA, Compact Substation (CSS).	Nos	4	1441225.35	57,64,901.40
5.2	Supply, Installation, Testing and Commissioning of Automatic Power Factor Correction (APFC) Panel with 150 kVAR shunt capacitors complete in all respect.	Nos	2	154306.01	3,08,612.02
5.3	Supply, Installation, Testing and Commissioning of Indoor Type Main LT Panel with incomer 2x800A ACB and outgoing 2x400A MCCB, 2x250A MCCB & 14x200A MCCB.	Nos	1	1074715.97	10,74,715.97
5.4	Supply, Installation, Testing and Commissioning of Indoor Type LT Distribution Panel with incomer 2x160A MCCB and outgoing 9x63A MCCB.	Nos	7	337056.07	23,59,392.49
5.5	Supply, Installation, Testing and Commissioning of Indoor Type LT Distribution Panel with incomer 2x160A MCCB and outgoing 6x63A MCCB.	Nos	3	303350.47	9,10,051.41

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
5.6	Supply, Installation, Testing and Commissioning of Indoor Type Main LT Panel with incomer 2x800A ACB and outgoing 1x400A, 2x250A, 4x125A, 4x100A and 6x63A MCCBs.	Nos	1	859772.78	8,59,772.78
5.7	Supply, Installation, Testing and Commissioning of Indoor Type Essential LT Panel with incomer 2x800A ACB and outgoing 1x400A, 2x250A, 4x125A, 3x100A and 2x63A MCCBs.	Nos	1	773795.50	7,73,795.50
5.8	Supply, installation, testing and commissioning of VRV LT Panel distribution board consisting of (1) incoming 2x400A, 4 pole MCCB, (2) outgoing 20x63A, 4 poles, MCCB's complete with all accessories as required.	Nos	1	807415.29	8,07,415.29
5.9	Supply, installation, testing and commissioning of Lift Panel consisting of (1) incoming 1x100A, 4 pole MCCB, (2) outgoing 3x63A, 4 poles, MCCB's complete with all accessories as required.	Nos	1	175482.49	1,75,482.49
5.10	Supply and Installation of 3 mm Thick Rubber Mat.	Sqm	105	2440.57	2,56,259.85

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
5.11	Supply, Installation, Testing and Commissioning of 200 kVA Capacity, 440 volt, 3-phase, Radiator Cooled Silent Genset.	Nos	2	1661437.64	33,22,875.28
5.12	Supply, Installation, Testing and Commissioning of Feeder Pillar.	Nos	2	117047.37	2,34,094.74
5.13	Supply, Installation, Testing and Commissioning of Earth Electrode (4 meter long, 19 mm dia, copper cladded steel electrode with minimum 250 micron copper cladding) Complete with RCC chamber etc.	Nos	82	3864.07	3,16,853.74
5.14	Supply, Installation, Testing and Commissioning of Earth Electrode (4 meter long, 19 mm dia, copper cladded steel electrode with minimum 250 micron copper cladding) buried in ground complete.	Nos	125	3670.87	4,58,858.75
5.15	Supply and Installation of 40x5 mm Copper Strip on Surface or in Recess or in GI Pipe.	m	130	1739.03	2,26,073.90
5.16	Supply and installation of 40x6 mm GI Flat.	m	1005	140.92	1,41,624.60

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
5.17	Supply and Installation of 5 mm Dia GI Wire.	m	1460	72.23	1,05,455.80
5.18	Supply and installation of lightning conductor finials (air conductor) of 25 mm dia 1000 mm long GI pipe having a single copper prong and welding on base.	Nos	6	1042.82	6,256.92
5.19	Supply, installation, testing and commissioning of air craft warning lights complete with non flickering type lights similar to GEC model ZH 752 or WIPRO model no. WAN 20001 or equivalent including lamps, mounting bracket, earthing, painting complete with accessories to automatically switch off lights.	Nos	1	9653.70	9,653.70
<b>6</b>	<b>FIRE DETECTION &amp; ALARM SYSTEM AND FIRE FIGHTING</b>				
6.1	Supply and Installation of Safety Items for IMD Manesar.	Set	1	10609.24	10,609.24
6.2	Supply and Installation of Safety Items for Manesar Station and other Building.	Set	2	8552.76	17,105.52

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
6.3	Supply and installation of Set of 04 nos. fire buckets (10 litre) capacity with one GI stand and GI cover.	Set	5	6862.19	34,310.95
6.4	Supply, installation, testing and commissioning of microprocessor based 4 loop Fire Alarm Control Panel.	Nos	1	470291.40	4,70,291.40
6.5	Supply, installation, testing and commissioning of Repeater Panel.	Nos	1	83068.63	83,068.63
6.6	Supply, installation, testing and commissioning of analogue addressable microprocessor based photo thermal multi criteria smoke cum heat detector.	Nos	270	3611.31	9,75,053.70
6.7	Supply, installation, testing and commissioning of Multi Co-operative Sensing Analogue Addressable Rate of Rise Cum Fixed temperature, heat detector.	Nos	8	4333.57	34,668.56
6.8	Supply, Installation, testing and commissioning of addressable Manual Glass Break station.	Nos	12	3755.76	45,069.12
6.9	Supply, installation, testing and commissioning of Conventional Sounder cum strobe.	Nos	12	4145.22	49,742.64



<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
6.10	Supply, installation, testing and commissioning of Addressable Control modules for Hooters/ Sounders/ Strobes.	Nos	12	5128.06	61,536.72
6.11	Supply, installation, testing and commissioning of addressable type Fault isolator.	Nos	12	1877.88	22,534.56
6.12	Supply, installation, testing and commissioning of Response Indicators.	Nos	90	195.44	17,589.60
6.13	Supply and installation on surface/ conduit 2x1.5 sq.mm 1.1 kV grade FRLS insulated PVC sheathed copper conductor armoured cable.	m	2200	144.45	3,17,790.00
6.14	Supply, installation, testing and commissioning of single pair PVC insulated twisted 32/0.2 mm dia copper conductor 1.1 kV cable.	m	700	45.58	31,906.00
<b>7</b>	<b>FIRE FIGHTING AND SUPPRESSION SYSTEM</b>				
7.1	Supply, installation, testing and commissioning of Main Fire Pump (2850 LPM at 90m head).	Nos	2	393438.89	7,86,877.78

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.2	Supply, installation, testing and commissioning of Diesel Fire Pump (2850 LPM at outlet head of 90 m).	Nos	1	662541.37	6,62,541.37
7.3	Supply, installation, testing and commissioning of Jockey Pump (180 LPM at 90 m head).	Nos	2	123235.76	2,46,471.52
7.4	Supply, installation, testing and commissioning of Drainage Pump (400 LPM discharge of water at 10 m head).	Nos	2	405953.10	8,11,906.20
7.5	Supply, Installation, Testing and Commissioning of Electrical Control Panel for Main Fire Pump, Jockey Pump, Drainage Pump.	Nos	1	794649.21	7,94,649.21
7.6	Supply, installation, testing and commissioning of Annunciation Panel	Nos	1	50781.98	50,781.98
7.7	Supply, installation, testing and commissioning of G.I. Heavy Class External Pipe: 200 mm nominal bore.	m	30	4274.11	1,28,223.30
7.8	Supply, installation, testing and commissioning of G.I. Heavy Class External Pipe: 150 mm nominal bore.	m	250	3109.55	7,77,387.50

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.9	Supply, installation, testing and commissioning of G.I. Heavy Class External Pipe: 100 mm nominal bore.	m	300	2201.52	6,60,456.00
7.10	Supply, installation, testing and commissioning of G.I. Heavy Class External Pipe: 80 mm dia nominal bore.	m	600	1627.39	9,76,434.00
7.11	Supply, installation, testing and commissioning of G.I. Heavy Class Internal Pipe: 65 dia nominal bore.	m	120	1180.84	1,41,700.80
7.12	Supply, installation, testing and commissioning of G.I. Heavy Class Internal Pipe: 50 dia nominal bore.	m	100	1004.39	1,00,439.00
7.13	Supply, installation, testing and commissioning of G.I. Heavy Class Internal Pipe: 40 dia nominal bore.	m	100	718.01	71,801.00
7.14	Supply, installation, testing and commissioning of G.I. Heavy Class Internal Pipe: 25 dia nominal bore.	m	800	494.05	3,95,240.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.15	Excavating Trenches width 500 mm and depth upto 1500 mm for external pipes, as per design.	m	100	159.17	15,917.00
7.16	Supply and installation of Synthetic Enamel Paint for: 200 mm nominal bore.	m	30	87.61	2,628.30
7.17	Supply and installation of Synthetic Enamel Paint for: 150 mm nominal bore.	m	250	72.80	18,200.00
7.18	Supply and installation of Synthetic Enamel Paint for: 100 mm nominal bore.	m	300	65.40	19,620.00
7.19	Supply and installation of Synthetic Enamel Paint for: 80 mm nominal bore.	m	600	57.99	34,794.00
7.20	Supply and installation of Synthetic Enamel Paint for: 65 mm nominal bore.	m	120	50.59	6,070.80
7.21	Supply and installation of Synthetic Enamel Paint for: 50 mm nominal bore.	m	100	43.19	4,319.00
7.22	Supply and installation of Synthetic Enamel Paint for: 40 mm nominal bore.	m	100	35.78	3,578.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.23	Supply and installation of Synthetic Enamel Paint for: 25 mm nominal bore.	m	800	25.91	20,728.00
7.24	Supply and installation of Single Headed Hydrant Valve: Internal works	Nos	12	7155.39	85,864.68
7.25	Supply and installation of Single Headed Hydrant Valve: External works	Nos	6	7155.39	42,932.34
7.26	Supply, installation, testing and commissioning of Butterfly Valve of size: 150 mm nominal size	Nos	9	7062.84	63,565.56
7.27	Supply, installation, testing and commissioning of Butterfly Valve of size: 100 mm nominal size	Nos	8	5944.93	47,559.44
7.28	Supply, installation, testing and commissioning of Butterfly Valve of size: 80 mm nominal size	Nos	5	4639.46	23,197.30
7.29	Supply, installation, testing and commissioning of Butterfly Valve of size: 50 mm nominal size	Nos	5	3234.72	16,173.60
7.30	Supply and installation of Orifice Plate of size: 80 mm dia	Nos	10	2029.77	20,297.70

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.31	Supply, installation, testing and commissioning of Non-Return Valve of size: 150 mm nominal size	Nos	5	12758.53	63,792.65
7.32	Supply, installation, testing and commissioning of Non-Return Valve of size: 100 mm nominal size	Nos	4	7249.16	28,996.64
7.33	Supply, installation, testing and commissioning of Non-Return Valve of size: 80 mm nominal size	Nos	5	5799.33	28,996.65
7.34	Supply and installation of Pot Strainer of size: 150 mm size	Nos	9	13463.08	1,21,167.72
7.35	Supply and installation of Pot Strainer of size: 100 mm size	Nos	4	11780.66	47,122.64
7.36	Supply and installation of Gun Metal Ball Valve of size: 50 mm nominal size	Nos	18	4039.79	72,716.22
7.37	Supply and installation of Non-Percolating Fire hose Pipe - 15m length	Nos	32	5365.00	1,71,680.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.38	Supply and installation of Short Branch Pipe for fire hose.	Nos	22	2175.37	47,858.14
7.39	Supply and installation of First Aid Hose Reel	Nos	16	11744.26	1,87,908.16
7.40	Supply, installation, testing and commissioning of Double Flanged Rubber Expansion Joint: 150 mm dia	Nos	6	11984.25	71,905.50
7.41	Supply, installation, testing and commissioning of Double Flanged Rubber Expansion Joint: 100 mm dia	Nos	4	10682.49	42,729.96
7.42	Supply, installation, testing and commissioning of Double Flanged Rubber Expansion Joint: 80 mm dia	Nos	2	8545.99	17,091.98
7.43	Supply, installation, testing and commissioning of Hose Cabinet (External)	Nos	16	9356.66	1,49,706.56
7.44	Supply and installation of Breeching Head	Nos	4	12401.93	49,607.72
7.45	Supply and installation of Fire Brigade Connection	Nos	4	8903.82	35,615.28

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.46	Supply and installation of Stainless Steel Collecting Head	Nos	4	7974.70	31,898.80
7.47	Supply, installation, testing and commissioning of Air Cushion Tank	Nos	1	28996.65	28,996.65
7.48	Supply, installation, testing and commissioning of Air Vessel Tank	Nos	1	28619.08	28,619.08
7.49	Supply and installation of Fireman's Axe	Nos	12	869.90	10,438.80
7.50	Supply, installation, testing and commissioning of Inspector's Test Assembly	Nos	5	18413.49	92,067.45
7.51	Supply, installation, testing and commissioning of Quartzoid Bulb Type Sprinklers	Nos	360	435.57	1,56,805.20
7.52	Supply and installation of Pressure Switch	Nos	5	2703.47	13,517.35
7.53	Supply and installation of 100 mm dia Control Valve	Nos	5	72491.63	3,62,458.15
7.54	Supply and installation of GI Angle Door Frame (size 2100 mm x 1200 mm)	Nos	12	12468.56	1,49,622.72



<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7.55	Supply and installation of Pressure Gauge	Nos	6	1885.40	11,312.40
7.56	Supply and installation of Flow switch	Nos	11	7539.13	82,930.43
7.57	Supply and installation of ABC Dry Powder 5 kg	Nos	44	1885.40	82,957.60
7.58	Supply and installation of Fire Extinguisher Water CO2 9 litre	Nos	44	2465.33	1,08,474.52
7.59	Supply and installation of Masonry Chamber (900 x 900 x 900 mm inside)	Nos	2	14498.33	28,996.66
<b>8</b>	<b>AIRCONDITIONING VRV SYSTEM</b>				
8.1	Supply, Installation, Testing and Commissioning of Modular type Outdoor Condensing Units (for cooling and heating) as per specifications: 16 HP along with EEV and all other accessories.	Nos.	16	422601.93	67,61,630.88
8.2	Supply, Installation, Testing and Commissioning of Wall mounted type Indoor Units (for cooling and heating) as per specifications: 1.0 TR along with EEV, remote control and all other accessories.	Nos.	43	47025.72	20,22,105.96

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
8.3	Supply, Installation, Testing and Commissioning of Wall mounted type Indoor Units (for cooling and heating) as per specifications: 1.6 TR along with EEV, remote control and all other accessories.	Nos.	11	48216.61	5,30,382.71
8.4	Supply, Installation, Testing and Commissioning of Wall/ Ceiling mounted type Indoor Units (for cooling and heating) as per specifications: 2.0 TR along with EEV, remote control and all other accessories.	Nos.	23	51338.50	11,80,785.50
8.5	Supply, Installation, Testing and Commissioning of Wall mounted type Indoor Units (for cooling and heating) as per specifications: 3.18 TR along with EEV, remote control and all other accessories.	Nos.	13	103054.50	13,39,708.50
8.6	Supply, Installation, Testing and Commissioning of Ceiling mounted type (cassette type) Indoor Units (for cooling and heating) 3.18 TR each along with EEV, remote control and all other accessories complete and as per specifications	Nos.	12	79382.07	9,52,584.84

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
8.7	Supply, Installation, Testing and Commissioning of interconnecting refrigerant copper pipe work with elastomeric nitrile rubber/ closed cell expanded polythene tubular insulation between each set of indoor and outdoor units as per specifications: 28.6 mm OD (outer dia) (insulation: 19 mm)	m	450	1167.29	5,25,280.50
8.8	Supply, Installation, Testing and Commissioning of interconnecting refrigerant copper pipe work with elastomeric nitrile rubber/ closed cell expanded polythene tubular insulation between each set of indoor and outdoor units as per specifications: 22.2 mm OD (outer dia) (insulation: 19 mm)	m	300	1055.90	3,16,770.00
8.9	Supply, Installation, Testing and Commissioning of interconnecting refrigerant copper pipe work with elastomeric nitrile rubber/ closed cell expanded polythene tubular insulation between each set of indoor and outdoor units as per specifications: 19.1 mm OD (outer dia) (insulation: 19 mm)	m	720	908.46	6,54,091.20

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
8.10	Supply, Installation, Testing and Commissioning of interconnecting refrigerant copper pipe work with elastomeric nitrile rubber/ closed cell expanded polythene tubular insulation between each set of indoor and outdoor units as per specifications: 15.9 mm OD (outer dia) (insulation: 13 mm)	m	720	756.26	5,44,507.20
8.11	Supply, Installation, Testing and Commissioning of interconnecting refrigerant copper pipe work with elastomeric nitrile rubber/ closed cell expanded polythene tubular insulation between each set of indoor and outdoor units as per specifications: 12.7 mm OD (outer dia) (insulation: 13 mm)	m	720	578.68	4,16,649.60
8.12	Supply, Installation, Testing and Commissioning of interconnecting refrigerant copper pipe work with elastomeric nitrile rubber/ closed cell expanded polythene tubular insulation between each set of indoor and outdoor units as per specifications: 9.5 mm OD (outer dia) (insulation: 13 mm)	m	720	512.86	3,69,259.20

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
8.13	Supply, Installation, Testing and Commissioning of control cum transmission wiring of 2 core x 2.5 sqmm copper FRLS, XLPE insulated cable along with suitable GI conduits between indoor and outdoor units.	m	3630	635.80	23,07,954.00
8.14	Supply, Installation, Testing and Commissioning of factory fabricated G.I. Sheet metal ducts with flanges complete as per specifications: 0.63 mm	Sqm	155	962.40	1,49,172.00
8.15	Supply, Installation, Testing and Commissioning of factory fabricated G.I. Sheet metal ducts with flanges complete as per specifications: 0.80 mm	Sqm	30	1132.52	33,975.60
8.16	Supply, Installation, Testing and Commissioning of factory fabricated G.I. Sheet metal ducts with flanges complete as per specifications: 1.0 mm	Sqm	75	1399.51	1,04,963.25
8.17	Supply, Installation, Testing and Commissioning of factory fabricated G.I. Sheet metal ducts with flanges complete as per specifications: 1.25 mm	Sqm	180	1634.21	2,94,157.80

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
8.18	Supply, Installation, Testing and Commissioning of powder coated extruded aluminium section Linear grills for supply/ return air as per specification.	Sqm	176	16926.98	29,79,148.48
8.19	Supply, Installation, Testing and Commissioning of powder coated extruded aluminium section grills with dampers for supply and air terminal for air-conditioning as per specification.	Sqm	20	17633.56	3,52,671.20
<b>9</b>	<b>LIFT</b>				
9.1	Supply, installation, testing and commissioning of 13 passenger (G+5), stainless steel door, heavy duty machine-room less elevator including spares.	Nos	1	3033236.90	30,33,236.90
<b>10</b>	<b>MISCELLANEOUS: Signage, Cable Tray, Cable Duct, Raceway, RO, Spares</b>				
10.1	Supply, Installation, Testing and Commissioning of 25 Litre Fully Automatic with Auto Cut-Off RO water purification system.	Nos	12	17850.00	2,14,200.00
10.2	Supply, Installation, Testing and Commissioning of Single Sided LED Signage Board.	Sqm	25	26331.73	6,58,293.25

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
10.3	Supply, Installation, Testing and Commissioning of Double Sided LED Signage Board.	Sqm	12	32658.52	3,91,902.24
10.4	Supply and Installation of GI Cable Duct 40x60 mm (wxh) minimum 2 mm thick sheet.	m	350	109.16	38,206.00
10.5	Supply and Installation of Stainless Steel Wire Mesh 25mm x 25mm (of 5 mm dia wire) welded on GI Angle.	Kg	250	89.78	22,445.00
10.6	Supply, Fabrication and Installation of hot dipped galvanised GI Perforated Cable Tray of size 150 mm wide x 50 mm deep with sheet thickness 2 mm complete as per specification.	m	500	747.49	3,73,745.00
10.7	Supply, Fabrication and Installation of hot dipped galvanised GI Perforated Cable Tray of size 300 mm wide x 50 mm deep with sheet thickness 2 mm complete as per specification.	m	420	1107.76	4,65,259.20
10.8	Supply, Fabrication and Installation of hot dipped galvanised GI Cable ladders with sheet thickness 2 mm complete as per specification.	Kg	500	148.27	74,135.00

<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
10.9	Supply, Installation and Testing of hot dipped galvanised GI Raceway of size 200 mm wide x 50 mm deep with sheet thickness 2 mm complete as per specification.	m	100	1191.09	1,19,109.00
10.10	Supply, Installation and Testing of hot dipped galvanised GI Raceway of size 100 mm wide x 50 mm deep with sheet thickness 2 mm complete as per specification.	m	100	839.40	83,940.00
10.11	Supply, Installation and Testing of hot dipped galvanised GI Raceway of size 100 mm wide x 25 mm deep with sheet thickness 2 mm complete as per specification.	m	100	595.54	59,554.00
<b>10.12</b>	<b>Spares</b>				
10.12.1	Digital Earth Testers	Nos	2	10490.55	20,981.10
10.12.2	Earth Leakage Detector 1000 V	Nos	2	26091.45	52,182.90
10.12.3	Digital Insulation Tester 2.5 kV	Nos	2	8986.95	17,973.90
10.12.4	Digital Insulation Tester 0 – 1000 V	Nos	2	2283.75	4,567.50
10.12.5	Digital Vernier Calliper	Nos	2	13998.30	27,996.60



<b>Schedule 'B': General Electrical Services</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (INR)</b>	<b>Estimated Amount (INR)</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
10.12.6	Digital Multi-meter	Nos	4	1564.50	6,258.00
10.12.7	Tool Kit Box	Nos	2	6933.15	13,866.30
10.12.8	Portable Electrical Drill	Nos	2	16218.98	32,437.96
10.13	Operation and Maintenance Manuals	LS	LS		89,229.99
10.14	Training to Staff	LS	LS		2,23,074.98
	<b>Total of Schedule</b>				<b>8,95,42,297.26</b>
	Design and Drawing of Electrical items under the schedule mentioned in BOQ, Explanatory Notes, Tender Specification etc. including calculation, survey, as-built drawings etc.				17,90,845.95
<b>Total Estimated Amount of Schedule 'B': General Electrical Services</b>					<b>9,13,33,143.21</b>